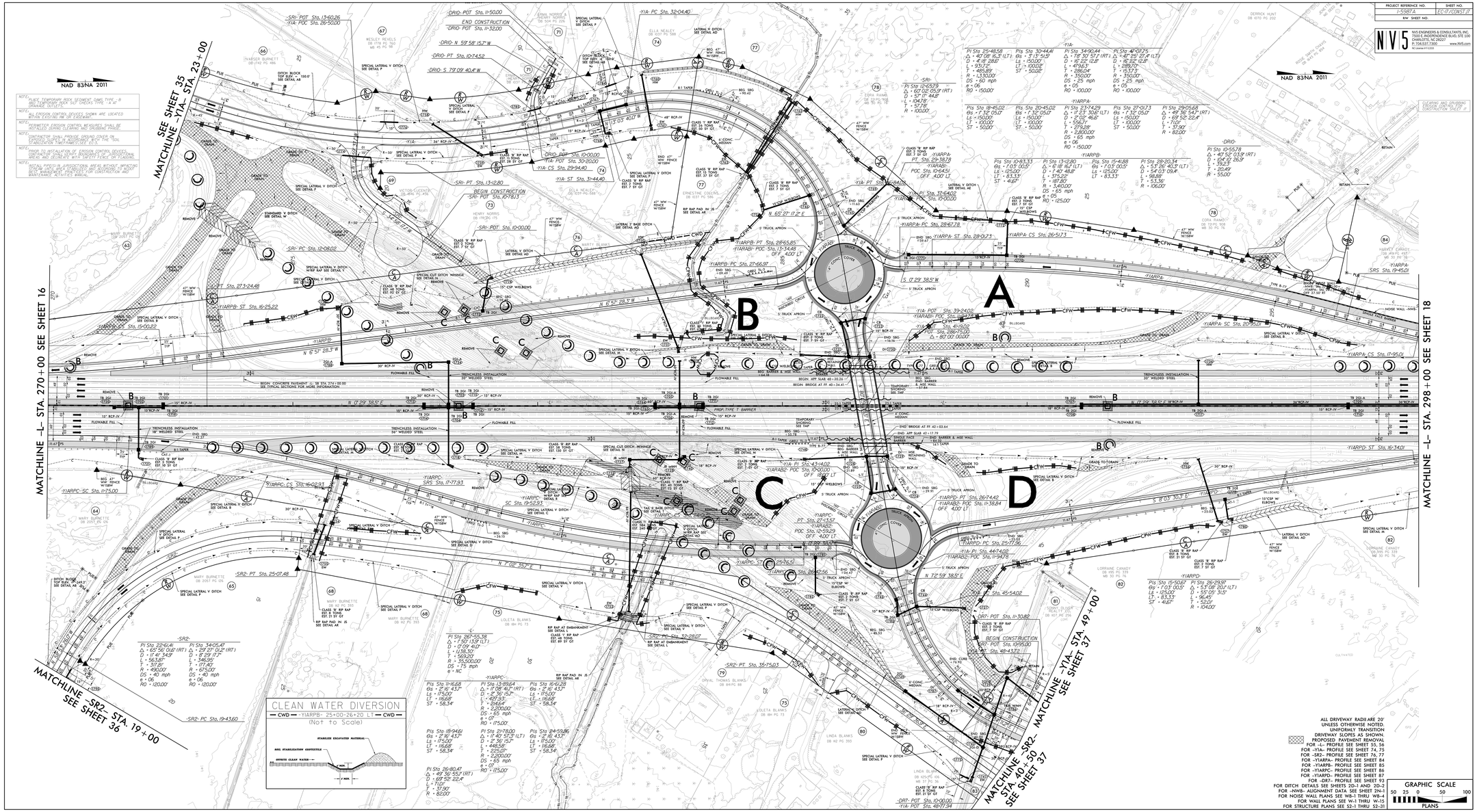
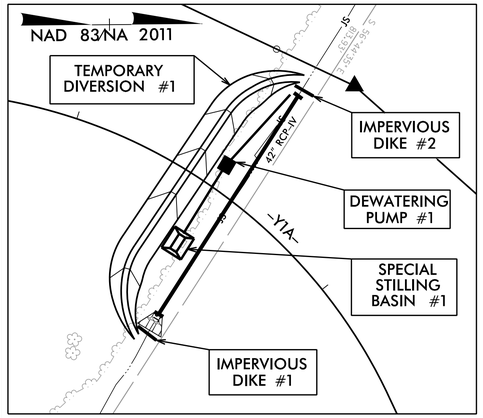

PROJECT REFERENCE NO. 7-5687A
SHEET NO. EC-17/CONST 17
R/W SHEET NO.
NV5 NV5 ENGINEERS & CONSULTANTS, INC. 7500 E. INDEPENDENCE BLVD, STE 100 CHARLOTTE, NC 28227 P. 704.537.7300 www.NV5.com NC License # P-1320
NAD 83/NA 2011
MATCHLINE –L– STA. 270+00 SEE SHEET 16
MATCHLINE –L– STA. 298+00 SEE SHEET 18
MATCHLINE –SR2– STA. 19+00 SEE SHEET 36
MATCHLINE –Y1A– STA. 23+00 SEE SHEET 35
MATCHLINE –Y1A– STA. 49+00 SEE SHEET 37
MATCHLINE –SR2– STA. 40+50 SEE SHEET 37
A
B
C
D
CLEAN WATER DIVERSION
CWD –Y1ARPB– 25+00-26+20 LT CWD
(Not to Scale)
STABILIZED EXCAVATED MATERIAL
RIPRAP STABILIZATION CHUTE/TOE
OPPOSITE CLEAN WATER
FLOW
DITCH
ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED. UNIFORMLY TRANSITION DRIVEWAY SLOPES AS SHOWN.
PROPOSED PAVEMENT REMOVAL
FOR –L– PROFILE SEE SHEET 55, 56
FOR –Y1A– PROFILE SEE SHEET 74, 75
FOR –SR2– PROFILE SEE SHEET 76, 77
FOR –Y1ARPA– PROFILE SEE SHEET 84
FOR –Y1ARPB– PROFILE SEE SHEET 85
FOR –Y1ARPC– PROFILE SEE SHEET 86
FOR –Y1ARPD– PROFILE SEE SHEET 87
FOR –DR7– PROFILE SEE SHEET 93
FOR DITCH DETAILS SEE SHEETS 20-1 AND 20-2
FOR –NWB– ALIGNMENT DATA SEE SHEET 29-1
FOR NOISE WALL PLANS SEE W-1 THRU W-4
FOR WALL PLANS SEE W-1 THRU W-15
FOR STRUCTURE PLANS SEE S2-1 THRU S2-31
GRAPHIC SCALE
50 25 0 50 100
PLANS

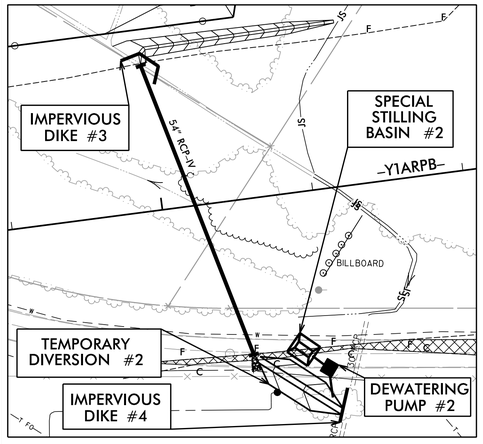
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-17A/CONST.17
R/W SHEET NO.	



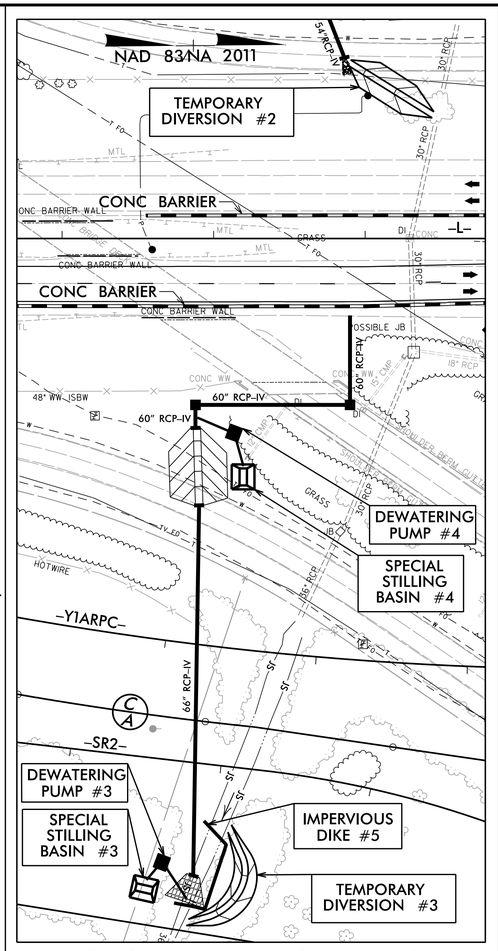
CONSTRUCTION SEQUENCE STA. 35+20 –Y1A– FOR PROPOSED 42" RCP–IV

1. INSTALL IMPERVIOUS DIKES #1 AND #2. CONSTRUCT IMPERVIOUS DIKES AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
2. CONSTRUCT TEMPORARY DIVERSION #1. INSTALL SPECIAL STILLING BASIN #1 AND DEWATERING PUMP #1.
3. DIVERT FLOW INTO TEMPORARY DIVERSION #1 AND INSTALL 42" RCP, HW'S AND OUTLET STABILIZATION.
4. REMOVE IMPERVIOUS DIKES #1 AND #2 AND DIVERT FLOW TO 42" RCP. REMOVE TEMPORARY DIVERSION #1, SPECIAL STILLING BASIN #1 AND DEWATERING PUMP #1.
5. CONSTRUCT ROADWAY FOR –Y1A–.



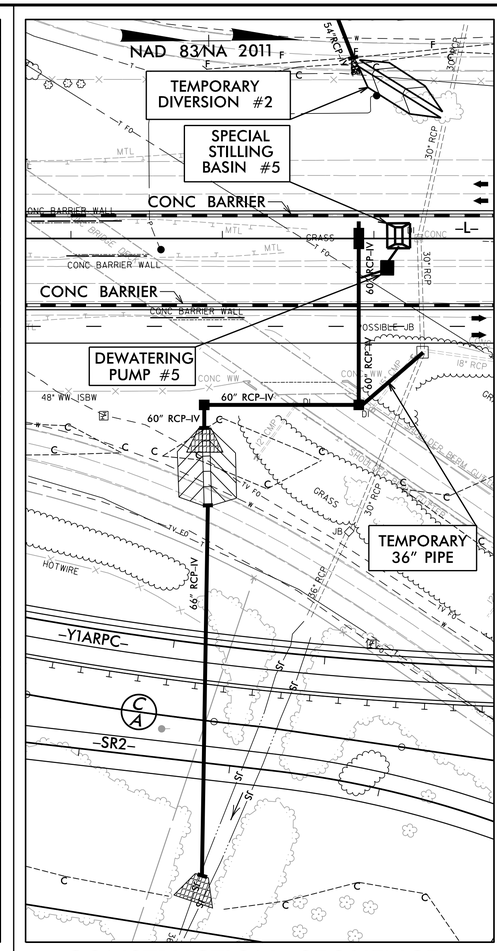
CONSTRUCTION SEQUENCE STA. 25+22 –Y1ARPB– FOR PROPOSED 54" RCP–IV

1. INSTALL IMPERVIOUS DIKES #3 AND #4. CONSTRUCT IMPERVIOUS DIKES AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS. USE PUMP AROUND OPERATION AT IMPERVIOUS DIKE #3 FOR EXISTING DITCH.
2. CONSTRUCT TEMPORARY DIVERSION #2. INSTALL SPECIAL STILLING BASIN #2 AND DEWATERING PUMP #2.
3. INSTALL 54" RCP, HW'S AND OUTLET STABILIZATION. CONSTRUCT ROADSIDE DITCH.
4. REMOVE IMPERVISOUS DIKES #3 AND #4 AND DIVERT FLOW TO 54" RCP. REMOVE SPECIAL STILLING BASIN #2 AND DEWATERING PUMP #2.
5. CONSTRUCT ROADWAY FOR –Y1ARPB–.



CONSTRUCTION SEQUENCE STA. 282+90 –L– FOR PROPOSED 60" RCP–IV PHASE I

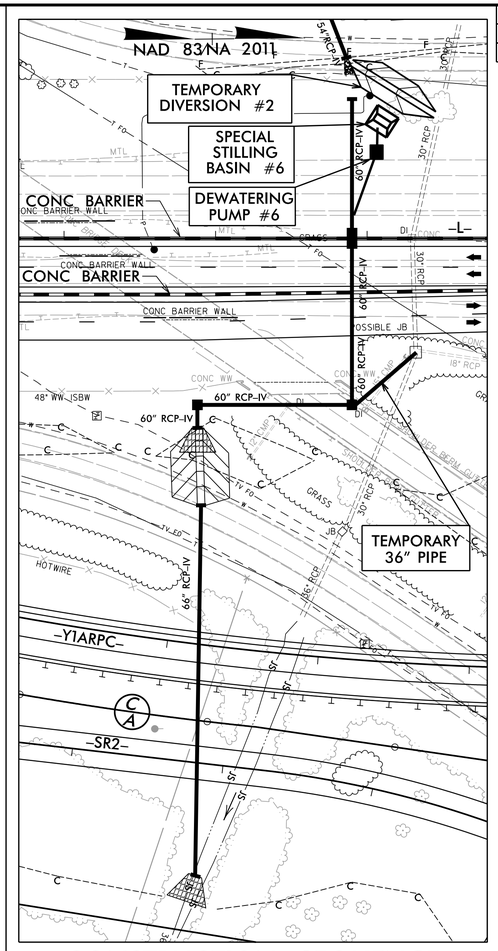
1. SHIFT NORTHBOUND TRAFFIC ONTO THE TEMPORARY PAVEMENT AS SHOWN IN THE TRAFFIC CONTROL PLANS.
2. CONSTRUCT TEMPORARY DIVERSION CHANNEL #3 WHILE MAINTAINING FLOW IN THE EXISTING CHANNEL.
3. INSTALL IMPERVIOUS DIKE #5. CONSTRUCT IMPERVIOUS DIKE AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
4. INSTALL SPECIAL STILLING BASIN #3 AND DEWATERING PUMP #3. DIVERT FLOW INTO TEMPORARY DIVERSION.
5. INSTALL SPECIAL STILLING BASIN #4 AND DEWATERING PUMP #4.
6. CONSTRUCT 66" RCP–IV, HW'S AND OUTLET STABILIZATION. CONSTRUCT 60" RCP–IV PIPE NETWORK AS SHOWN.
7. INSTALL TEMPORARY 36" PIPE AS SHOWN IN PHASE II. DIVERT FLOW TO 60" PIPE NETWORK.
8. REMOVE TEMPORARY DIVERSION #3, IMPERVIOUS DIKE #5, SPECIAL STILLING BASIN #3 AND DEWATERING PUMP #3. REMOVE SPECIAL STILLING BASIN #4 AND DEWATERING PUMP #4.
9. COMPLETE ROADWAY FOR –SR2– AND –Y1ARPC–.



CONSTRUCTION SEQUENCE STA. 282+90 –L– FOR PROPOSED 60" RCP–IV PHASE II

1. APPLY A NIGHTTIME LANE CLOSURE TO EXTEND THE 60" RCP INTO THE NBL BEFORE SHIFTING TRAFFIC.
2. COMPLETE THE NBL ROADWAY AND SHIFT THE NB TRAFFIC ONTO THE NEWLY CONSTRUCTED NB SECTION.
3. INSTALL SPECIAL STILLING BASIN #5 AND DEWATERING PUMP #5.
4. INSTALL 60" RCP AND INLETS AS SHOWN.
5. REMOVE SPECIAL STILLING BASIN #5 AND DEWATERING PUMP #5.
6. CONSTRUCT ROADWAY ALONG MEDIAN AND STABILIZE ALL DISTURBED AREAS.

*EXECUTE ALL PHASES OF CONSTRUCTION IN A CONTINUOUS MANNER, AS MUCH AS PERMITTED BY TRAFFIC MANAGEMENT PLAN PHASING.

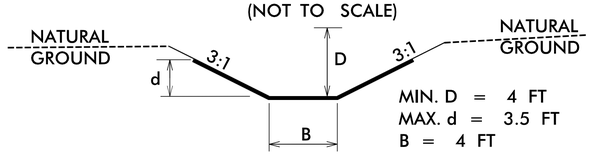


CONSTRUCTION SEQUENCE STA. 282+90 –L– FOR PROPOSED 60" RCP–IV PHASE III

1. CONSTRUCT THE WESTERN SECTION OF THE NBL AS SHOWN ON THE TRAFFIC CONTROL PLANS AND SHIFT SB TRAFFIC ONTO THE WESTERN NORTHBOUND LANES.
2. INSTALL SPECIAL STILLING BASIN #6 AND DEWATERING PUMP #6.
3. INSTALL 60" RCP AND HW. DIVERT FLOW FROM 54" RCP TO 60" RCP.
4. REMOVE TEMPORARY DIVERSION #2, SPECIAL STILLING BASIN #6 AND DEWATERING PUMP #6. REMOVE TEMPORARY 36" PIPE.
5. CONSTRUCT ROADWAY AND SHIFT SB TRAFFIC TO THE NEWLY BUILT SECTION OF THE SBL.

TEMPORARY DIVERSION CHANNEL

(NOT TO SCALE)



MIN. D = 4 FT
MAX. d = 3.5 FT
B = 4 FT

TYPE OF LINER = GEOTEXTILE FOR SOIL STABILIZATION

4/7/2022
D:\Projects\2019\2019217.02\CLIENT\Environmental\Design\I5987A_EC_PSH_017A.dgn
sandersk

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-18/CONST J8
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

REVISIONS

8/17/99

ROW REVISION - 10/22/2021 - CHANGED PARCEL NUMBER 92 TO 90, PARCEL NUMBER 92 IS REMOVED (NOT USED) - CDA

NAD 83/NA 2011

MATCHLINE –L– STA. 298+00 SEE SHEET 17

MATCHLINE –L– STA. 312+00 SEE SHEET 19

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 18

JOHNNY JONES DB 190 PG 50

SGLG PROPERTIES LLC DB 1694 PG 532

TEDDY BLANKS DB 617 PG 826

KAREN LOCKLEAR DB 1434 PG 889

ALBERTINA RODGERS DB 1508 PG 275

85 NO CLAIM LINDA JONES DB 1670 PG 323

86 EDWARD OXENDINE DB 1689 PG 611

84 HARVEY CANADY DB 1491 PG 497 MB 30 PG 76

87 CALEB RAY LOCKLEAR DB 1840 PG 443

88 ORLANDO SANTOS DB 1787 PG 268

89 JACQUELINE GRAHAM DB 793 PG 770

90 JOSEPH SANDERSON DB 470 PG 234

90 JOSEPH SANDERSON DB 413 PG 277

94 LORRAINE CANADY DB 1195 PG 339

91 LEEVON GODWIN DB 599 PG 161

82 LORRAINE CANADY DB 1195 PG 339 MB 30 PG 76

93 LORRAINE CANADY DB 1195 PG 339

PUE

47" WW FENCE W/1SBW

NOISE WALL –NW8– 15" RCP–IV

SPECIAL LATERAL V DITCH SEE DETAIL B

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GT

STANDARD V DITCH SEE DETAIL W

BILLBOARD

SINGLE FACE BARRIER

-YIARPA-

-YIARPA- SC Sta. 13+50.70

-YIARPA- TS Sta. 12+00.70

-YIARPA- POT Sta. 10+00.00

-L- POT Sta. 305+88.00

OFF 61.00' LT

135 x 24 x 3 2 inch Skimmer with 1.625 inch Orifice Diameter 16 ft. weir ID 18.2

SPECIAL LATERAL V DITCH SEE DETAIL AC

CLASS 'B' RIP RAP EST. 39 TONS EST. 30 SY GT

FILL CHANNEL WITH CLASS II RIPRAP TO ELEV = 132.2' EST. 215 TONS CLASS II RIPRAP

34 LF OF CHANNEL IMPROVEMENTS SEE DETAIL SHEET 2D-2

END 47" WW FENCE W/1SBW

BEG 47" WW FENCE W/1SBW

END NOISE WALL –NW8– Sta. 23+90.00 = Sta. 307+76.50 RT

REMOVE EXISTING RCBC

TYPE B–77

SEE SHEETS 2N–1 & 2A–7 FOR DETAIL

END CONCRETE PAVEMENT –L– SB STA. 299+00.00 SEE TYPICAL SECTIONS FOR MORE INFORMATION

TEMPORARY SHORING SEE TMP

BEG SBG +93.55

TRENCHLESS INSTALLATION 42" WELDED STEEL

TRENCHLESS INSTALLATION 18" WELDED STEEL

REMOVE

FLOWABLE FILL

BEG SBG +84.43

-YIARPD-

-YIARPD- CS Sta. 15+09.01

-YIARPD- SC Sta. 11+25.00

-YIARPD- ST Sta. 10+00.00

-L- POT Sta. 304+21.87

OFF 61.00' RT

780' ACCELERATION

8:1 TAPER

GREU TL–3

EST. 20 TONS CLASS II RIPRAP EST. 22 SY GEOTEXTILE

END SBG +84.43

CLASS 'B' RIP RAP EST. 3 TONS EST. 10 SY GT

EST. 80 TONS CLASS II RIPRAP EST. 85 SY GEOTEXTILE

TOE PROTECTION SEE DETAIL AH

SPECIAL LATERAL 3' BASE DITCH SEE DETAIL AK

FILL CHANNEL WITH CLASS II RIPRAP TO ELEV = 131.9' EST. 1000 TONS CLASS II RIPRAP

45 LF OF CHANNEL IMPROVEMENTS SEE DETAIL SHEET 2D–2

SPECIAL LATERAL V DITCH SEE DETAIL M

SPECIAL LATERAL 3' BASE DITCH SEE DETAIL O

CLASS 'B' RIP RAP EST. 11 TONS EST. 28 SY GT

145 x 29 x 3 2 inch Skimmer with 1.750 inch Orifice Diameter 15 ft. weir ID 18.1

-YIARPA-

PI Sta 13+00.71
Θs = 1° 32' 05.0"
Ls = 150.00'
LT = 100.00'
ST = 50.00'

PI Sta 15+73.33
△ = 9° 05' 30.6" (RT)
D = 2° 02' 46.6"
L = 444.31'
T = 222.62'
R = 2,800.00'
DS = 65 mph
e = 06
R0 = 150.00'

-YIARPD-

PI Sta 10+83.33
Θs = 1° 03' 00.5"
Ls = 125.00'
LT = 83.33'
ST = 41.67'

PI Sta 13+17.21
△ = 6° 27' 07.8" (LT)
D = 1° 40' 48.8"
L = 384.01'
T = 192.21'
R = 3,410.00'
DS = 65 mph
e = 05
R0 = 125.00'

PI Sta 15+50.67
Θs = 1° 03' 00.5"
Ls = 125.00'
LT = 83.33'
ST = 41.67'

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES", SEE EC-3.

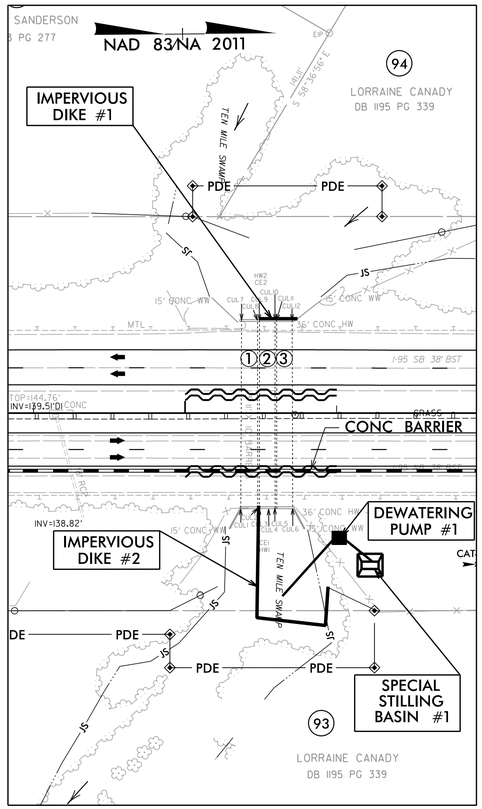
NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

FOR –L– PROFILE SEE SHEET 57
FOR –Y1ARPA– PROFILE SEE SHEET 84
FOR –Y1ARPD– PROFILE SEE SHEET 87
FOR DITCH DETAILS SEE SHEETS 2D–1 AND 2D–2
FOR –NW8– ALIGNMENT DATA SEE SHEET 2N–1
FOR NOISE WALL PLANS SEE W8–1 THRU W8–4
FOR CULVERT PLANS SEE C11–1 THRU C11–14

4/7/2022
K:\Local\Commercial\Design\I5987A_EC_PSH_018.dgn
samuel.kolonia

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-18A/CONST.18
R/W SHEET NO.	

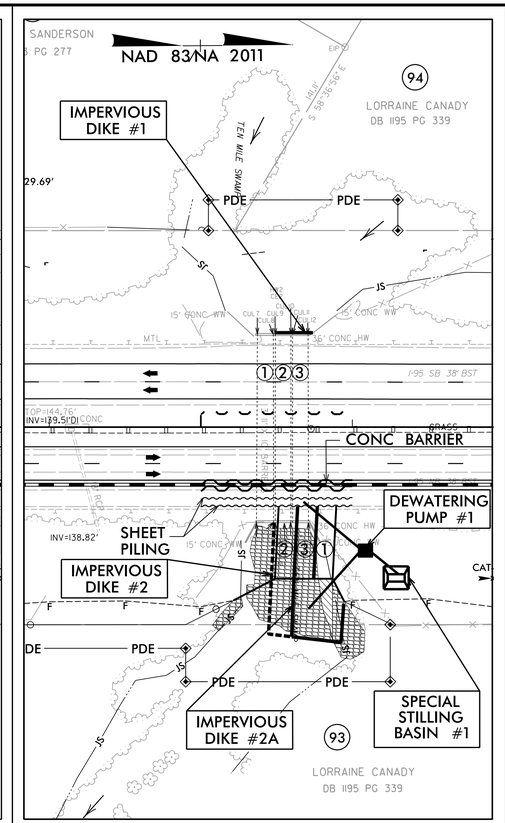


CONSTRUCTION SEQUENCE
STA. 310+73 –L–
FOR PROPOSED (3) 12′ X 12′ RCBC

EXECUTE ALL PHASES OF CONSTRUCTION IN A CONTINUOUS MANNER, AS MUCH AS PERMITTED BY TRAFFIC MANAGEMENT PLAN PHASING.

PHASE I

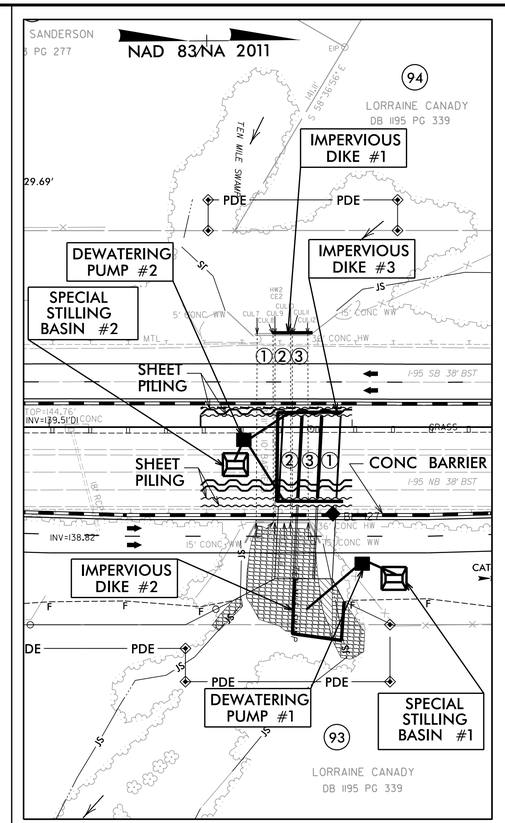
1. INSTALL SPECIAL STILLING BASIN #1 AND DEWATERING PUMP #1.
2. INSTALL IMPERVIOUS DIKES #1 AND #2. CONSTRUCT IMPERVIOUS DIKES AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
3. DIVERT FLOW INTO EXISTING BARREL #1



CONSTRUCTION SEQUENCE
STA. 310+73 –L–
FOR PROPOSED (3) 12′ X 12′ RCBC

PHASE II

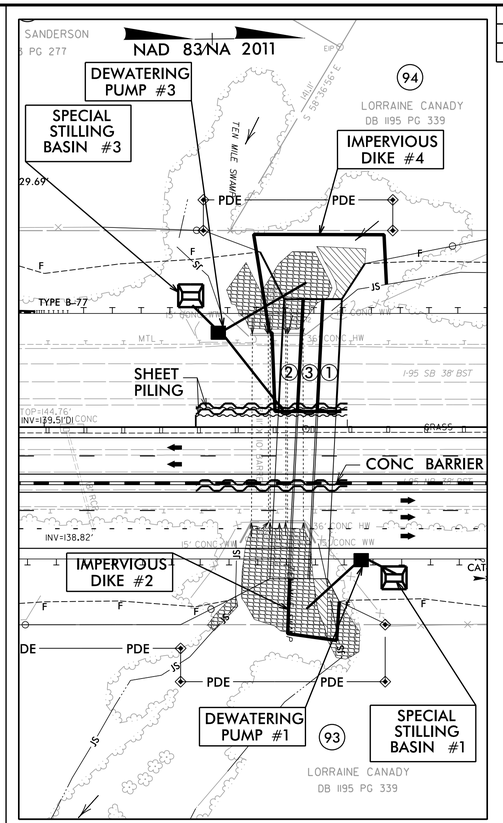
1. MAINTAIN FLOW INTO EXISTING BARREL #1.
2. INSTALL SHEET PILING AS SHOWN ON THE TRAFFIC CONTROL PLANS, LEAVING ENOUGH SPACE BETWEEN ROWS OF SHEET PILING TO MAINTAIN FLOW AREA OF CULVERT BARRELS.
3. MAINTAIN SPECIAL STILLING BASIN #1 AND ADD HOSE FOR DEWATERING PUMP #1 AS SHOWN.
4. REMOVE THE SECTION OF THE EXISTING BARRELS #2 AND #3 BETWEEN THE HW AND THE SHEET PILING.
5. FILL EXISTING CHANNEL AT THE OUTLET END WITH CLASS II RIP RAP PER CULVERT SURVEY REPORT. USE FLOATING TURBIDITY CURTAIN AS NEEDED /IF NEEDED FOR WORK IN LIVE STREAM.
6. CONSTRUCT SECTIONS #1, #2 AND #3 OF THE (3) 12′X12′ RCBC AND HW AND THE RIGHT WINGWALL AS SHOWN.
7. ADD NEW IMPERVIOUS DIKE #2A AND REMOVE THE PORTION OF IMPERVIOUS #2 SHOWN WITH THE DASHED LINE.
8. DIVERT FLOW INTO EXISTING BARREL #1 WEST OF THE SHEET PILING AND NEW BARREL #2. IMPERVIOUS DIKES ARE INTENDED TO ALLOW FLOW THROUGH ALL BARRELS DURING HIGH STREAM LEVELS. MAINTAIN OPENING OF ALL EXISTING AND PROPOSED BARRELS.
9. REMOVE THE SECTION OF THE EXISTING BARREL #1 BETWEEN THE HW AND THE SHEET PILING. CONSTRUCT LEFT WINGWALL.
10. CONSTRUCT THE SECTION OF THE NBL AS SHOWN ON THE TRAFFIC CONTROL PLANS.
11. CONSTRUCT OUTLET CHANNEL AND INSTALL BANK STABILIZATION.



CONSTRUCTION SEQUENCE
STA. 310+73 –L–
FOR PROPOSED (3) 12′ X 12′ RCBC

PHASE III

1. INSTALL IMPERVIOUS DIKE #3.
2. MAINTAIN FLOW INTO EXISTING BARREL #1 WEST OF THE SHEET PILING AND NEW BARREL #2.
3. INSTALL SPECIAL STILLING BASIN #2 AND DEWATERING PUMP #2.
4. SHIFT NB TRAFFIC ON THE NEWLY BUILT SECTION OF THE NBL.
5. INSTALL SHEET PILING AS SHOWN ON THE TRAFFIC CONTROL PLANS, LEAVING ENOUGH SPACE BETWEEN ROWS OF SHEET PILING TO MAINTAIN FLOW AREA OF CULVERT BARRELS.
6. REMOVE THE SECTION OF THE EXISTING BARRELS #2 AND #3 BETWEEN THE SHEET PILING. MAINTAIN TEMPORARY FLOW THROUGH THE CONSTRUCTION AREA BETWEEN EXISTING BARREL #1 WEST OF THE SHEET PILING AND NEW BARREL #2.
7. CONSTRUCT SECTIONS #1, #2 AND #3 OF THE (3) 12′X12′ RCBC AS SHOWN.
8. REMOVE IMPERVIOUS DIKE #3 AND DEWATERING PUMP #2 AND SPECIAL STILLING BASIN #2.
9. REMOVE THE SECTION OF THE EXISTING BARREL #1 BETWEEN THE SHEET PILING. MAINTAIN TEMPORARY FLOW THROUGH THE CONSTRUCTION AREA BETWEEN THE REMAINDER OF EXISTING BARREL #1 WEST OF THE SHEET PILING AND NEW BARREL #2.



CONSTRUCTION SEQUENCE
STA. 310+73 –L–
FOR PROPOSED (3) 12′ X 12′ RCBC

PHASE IV

1. SHIFT SB TRAFFIC ON THE NEWLY BUILT SECTION OF THE NBL.
2. INSTALL IMPERVIOUS DIKE #4 AND REMOVE IMPERVIOUS DIKE #1 WITH PROVISIONS FOR MAINTAINING FLOW THROUGH REMAINDER OF EXISTING BARREL #1 AND NEW BARREL #2. IMPERVIOUS DIKES ARE INTENDED TO ALLOW FLOW THROUGH ALL BARRELS DURING HIGH STREAM LEVELS. MAINTAIN OPENING OF ALL EXISTING AND PROPOSED BARRELS. INSTALL SPECIAL STILLING BASIN #3 AND DEWATERING PUMP #3.
3. COMPLETE BARRELS #1, #2 AND #3 WHILE MAINTAINING FLOW THROUGH EXISTING BARREL #1 AND NEW BARREL #2.
4. FILL THE EXISTING CHANNEL AT THE INLET END WITH CLASS II RIP RAP PER CULVERT SURVEY REPORT. USE FLOATING TURBIDITY CURTAIN AS NEEDED /IF NEEDED FOR WORK IN LIVE STREAM.
5. CONSTRUCT INLET CHANNEL AND INSTALL BANK STABILIZATION.
6. REMOVE IMPERVIOUS DIKES #2 AND #4 AND DIVERT FLOW INTO THE NEWLY CONSTRUCTED (3) 12′ X 12′ RCBC.
7. REMOVE THE HW AT THE INLET END AND THE LAST SECTION OF EXISTING BARREL #1.

PHASE V

1. REMOVE SPECIAL STILLING BASINS AND DEWATERING PUMPS.
2. STABILIZE ALL DISTURBED AREAS.
3. COMPLETE ROADWAY.
4. SHIFT SB TRAFFIC ON THE NEWLY BUILT SECTION OF THE SBL.

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_018A.dgn
sgmeltzkaloia

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-19/CONST.19
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES" SEE EC-3.

NOTE:
PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

NAD 83/NA 2011

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 19

MATCHLINE –L– STA. 312 + 00 SEE SHEET 18

MATCHLINE –L– STA. 326 + 00 SEE SHEET 20

CLASS 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GT

END 47" WW FENCE W/1SBW

94
LORRAINE CANADY
DB 1195 PG 339

15" RCP–IV

GREU TL-3

8:1 TAPER

TB 2GI <1911>

11.67 PS

END SBG +91.43

REMOVE 18" RCP–IV

TB 2GI <1901>

TB 2GI <1905>

15" RCP–IV

TB 2GI <1903>

15" RCP–IV

TB 2GI <1904>

TB 2GI <1913>

15" RCP–IV

TB 2GI <1906>

TB 2GI <1902>

TRENCHLESS INSTALLATION
18" WELDED STEEL

FLOWABLE FILL

300' TAPER <1909>

01.87

CLASS 'B' RIP RAP
EST. 3 TONS
EST. 10 SY GT

93
LORRAINE CANADY
DB 1195 PG 339

CL I RIP RAP
EST 7 TONS
EST 15 S.Y. GEOTEXTILE

150 x 30 x 3
ID 19.1

SPECIAL LATERAL V DITCH
SEE DETAIL C

95
NO CLAIM
BRUNSWICK TIMBER LLC
DB 1360 PG 690

N 0° 29' 38.5" E

PROP. TYPE T BARRIER

96
NO CLAIM
BRUNSWICK TIMBER LLC
DB 1360 PG 690

SPECIAL LATERAL V DITCH
SEE DETAIL C

150 x 30 x 3
ID 19.2

SPECIAL LATERAL V DITCH
SEE DETAIL B

CL I RIP RAP
EST 7 TONS
EST 15 S.Y. GEOTEXTILE

TB 2GI <1907>

15" RCP–IV

TB 2GI <1908>

15"RCP–IV

TRENCHLESS INSTALLATION
16" WELDED STEEL

<1910>

CLASS 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GT

SPECIAL LATERAL V DITCH
SEE DETAIL M

95
NO CLAIM
BRUNSWICK TIMBER LLC
DB 1360 PG 690

15" RCP–IV

TB 2GI <1914>

REMOVE

TB 2GI <1915>

FOR –L– PROFILE SEE SHEET 58
FOR DITCH DETAILS SEE SHEETS 2D–1 AND 2D–2

REVISIONS

8/17/99

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_019.dgn
samuel.kolnig

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-20/CONST.20
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES" SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

NOTE: FOR TRENCHLESS PIPE INSTALLATIONS AT JURISDICTIONAL STREAMS, FOLLOW CONSTRUCTION SEQUENCE FOR TRENCHLESS INSTALLATIONS ON SHEET EC-2.

NAD 83/NA 2011

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 20

MATCHLINE –L– STA. 326+00 SEE SHEET 19

MATCHLINE –L– STA. 340+00 SEE SHEET 21

96 NO CLAIM BRUNSWICK TIMBER LLC DB 1360 PG 690

97 NO CLAIM DELLA D. BAXLEY DB 2115 PG 325 MB 36 PG 69

95 NO CLAIM BRUNSWICK TIMBER LLC DB 1360 PG 690

98 DELLA D. BAXLEY DB 2115 PG 325 MB 36 PG 69

SPECIAL LATERAL V DITCH SEE DETAIL C

SPECIAL LATERAL V DITCH SEE DETAIL M

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GT

RIP RAP PAD IN JS SEE DETAIL AR

CLASS 'B' RIP RAP EST. 8 TONS EST. 21 SY GT

CLASS 'I' RIP RAP EST. 20 TONS EST. 39 SY GT

15" CSP 2014

EW 2007

TB 2GI 2013

CAT-1

8:1 TAPER

11.67 PS

BEG SBG +70.16

FLOWABLE FILL

TRENCHLESS INSTALLATION 30" WELDED STEEL

GREU TL-3

END SBG +32.66

REMOVE

18" RCP-IV

TB 2GI 2003

TB 2GI 2001

TB 2GI 2005

TB 2GI 2004

18" RCP-IV

30" RCP-IV

15"RCP-IV

TB 2GI 2006

TB 2GI 18" RCP-IV 2007

FLOWABLE FILL

TRENCHLESS INSTALLATION 30" WELDED STEEL

-L-

N 0° 29' 38.5" E

PROP. TYPE T BARRIER

CABLE

TRENCHLESS INSTALLATION 42" WELDED STEEL

TB 2GI-A 2011

42" RCP-IV

TB 2GI-A 2010

TRENCHLESS INSTALLATION 42" WELDED STEEL

EW 2009

HW 2008

TD

125 x 25 x 3 ID 20.1

PDE

CULTIVATED FIELD

WOODS

EXISTING R/W

FOR –L– PROFILE SEE SHEET 59

FOR DITCH DETAILS SEE SHEETS 2D-1 AND 2D-2

4/7/2022
K:\Environmental\Design\I5987A_EC_PSH_020.dgn
smuthiah

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-21/CONST.21
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VARIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 21

MATCHLINE –L– STA 340+00.00 SEE SHEET 20

MATCHLINE –L– STA 353+00.00 SEE SHEET 22

CAROL POWERS LIFE ESTATE
DB 590 PG 363
WB II-E PG 632

99
NO CLAIM

DELLA D. BAXLEY
DB 215 PG 325
MB 36 PG 69

97
NO CLAIM

CLASS 'I' RIP RAP
EST. 24 TONS
EST. 57 SY GEOTEXTILE

CLASS 'B' RIP RAP
EST. 13 TONS
EST. 34 SY GEOTEXTILE

TRENCHLESS INSTALLATION
48" WELDED STEEL

TRENCHLESS INSTALLATION
16" WELDED STEEL

FLOWABLE FILL

REMOVE

INVERTS INACCESSABLE DUE TO SILT DEPOSITS IN BOX

TEMPORARY SHORING

SPECIAL LATERAL
8.0' BASE DITCH
SEE DETAIL BB

FALSE CUT
8.0' BASE DITCH
SEE DETAIL DD

SPECIAL LATERAL
V DITCH
SEE DETAIL KK

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL AA

BEG 47" WW FENCE W/1SBW

47" WW FENCE W/1SBW

END 47" WW FENCE W/1SBW

CLASS 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE

BEG SBG +03.00

CLEAN WATER DIVERSION

CWD CWD CWD CWD

(Not to Scale)

STABILIZE EXCAVATED MATERIAL

SOIL STABILIZATION GEOTEXTILE

OFFSITE CLEAN WATER

2' MIN.

2:1

2' MIN.

DANNY CHAVIS AND WIFE EILEEN CHAVIS
DB 1368 PG 744

WILLIAM A. BRYANT JR.
NOW OR FORMERLY ALS
DB 1569 PG 569
MB 42 PG 140

98

100

101

FOR –L– PROFILE SEE SHEET 60

REVISIONS

8/17/99

4/7/2022
R:\LE\Environmental\Design\I5987A_EC_PSH_021.dgn
samuelsolis

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-22/CONST.22
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

REVISIONS

8/17/99

MATCHLINE –L– STA 353+00.00 SEE SHEET 21

MATCHLINE –L– STA 367+00.00 SEE SHEET 23

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 22

CAROL POWERS LIFE ESTATE
DB 590 PG 363
WB 11-E PG 632
99
NO CLAIM

THAD J. DAVIS AND WIFE, CHERYL J. DAVIS
DB 1841 PG 734
MB 42 PG 140
102

CAROL POWERS LIFE ES
DB 590 PG 363
WB 11-E PG 632
99
NO CLAIM

BRENDA B. SMITH
DB 2146 PG 260
104

WILLIAM A. BRYANT, JR. ET ALS
DB 1569 PG 569
MB 42 PG 140
101

PATRICIA R THOMPSON AND SPOUSE DAVID M. THOMPSON
DB 1979 PG 329
103

20 LF OF CHANNEL IMPROVEMENT WITH 1' FLOOD BENCH AT NORTH BARREL
EST. 3 TONS CLASS I RIPRAP
EST. 7 SY GEOTEXTILE
SEE DETAIL LL

END 47" WW FENCE W/1SBW

EST. 21 TONS CLASS I RIPRAP
EST. 35 SY GEOTEXTILE

CLASS 'B' RIP RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE

RIP RAP AT EMBANKMENT
SEE DETAIL GG

BEG 47" WW FENCE W/1SBW

96 x 16 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
5 ft. weir
ID 22.1

–L– STA 354+06
2@7'x7' RCBC
BURIED 1'
WITH BEVELED HEADWALL
SKEW=64°
1' SILL ON SOUTH BARREL
2' SILL ON NORTH BARREL
WITH 1' FLOOD BENCH

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL AA

REMOVE EXISTING
2@48" RCP
AND ENDWALL

CLASS 'B' RIP RAP
EST. 3 TONS
EST. 10 SY GEOTEXTILE

END SBG
+06.00

TRENCHLESS INSTALLATION
18" WELDED STEEL

EST. 40 TONS CLASS II RIPRAP
EST. 53 SY GEOTEXTILE

END 47" WW FENCE W/1SBW

RIP RAP AT EMBANKMENT
SEE DETAIL GG

BEG 47" WW FENCE W/1SBW

–L– 366+29
2@8'x9' RCBC
BURIED 1'
WITH 1' SILLS
WITH BEVELED HEADWALL

105 x 19 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 22.3

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL AA

CLASS 'B' RIP RAP
EST. 3 TONS
EST. 10 SY GEOTEXTILE

BEG 47" WW FENCE W/1SBW
CLASS 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE

END 47" WW FENCE W/1SBW

20 LF OF CHANNEL IMPROVEMENT
SEE DETAIL NN

FLOWABLE FILL

TRENCHLESS INSTALLATION
18" WELDED STEEL

BEG SBG +19.00

REMOVE

SKEW=64°

TEMPORARY SHORING

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL AA

REMOVE EXISTING
2@48" RCP
AND HEADWALL

BEG 47" WW FENCE W/1SBW

END 47" WW FENCE W/1SBW

RIP RAP AT EMBANKMENT
SEE DETAIL GG

RETAIN

INV=144.41'
24" HDPE
INV=144.38'

102 x 17 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
7 ft. weir
ID 22.2

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL AA

END 47" WW FENCE W/1SBW

FALSE SUMP
SEE DETAIL HH

102 x 17 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
7 ft. weir
ID 22.4

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL AA

CLASS 'B' RIP RAP PAD
GEOTEXTILE

BEG 47" WW FENCE W/1SBW

REMOVE EXISTING RCBC

CLASS 'B' RIP RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE

END 47" WW FENCE W/1SBW

40 LF OF CHANNEL IMPROVEMENT
SEE DETAIL OO

END SBG
+88.00

47" WW FENCE W/1SBW

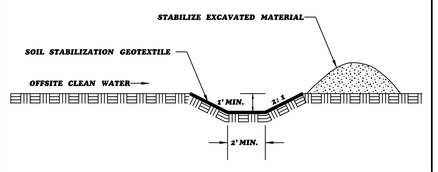
CLASS 'B' RIP RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE

19 LF OF CHANNEL IMPROVEMENT
WITH 1' FLOOD BENCH AT NORTH BARREL
EST. 2 TONS CLASS I RIPRAP
EST. 5 SY GEOTEXTILE
SEE DETAIL MM

CLEAN WATER DIVERSION

CWD CWD CWD CWD

(Not to Scale)



NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

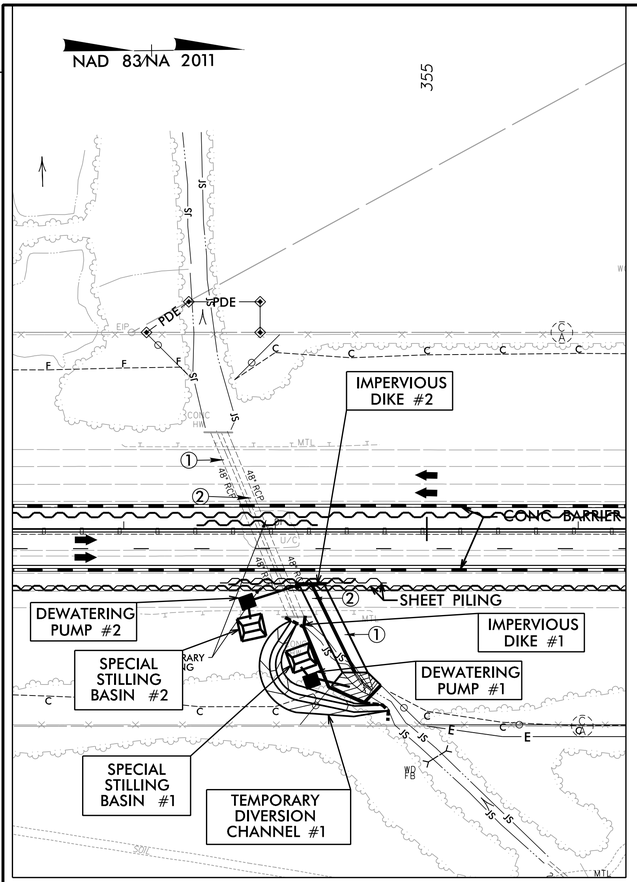
FOR –L– PROFILE SEE SHEET 61

4/7/2022
K:\Engineering\Environmental\Design\I5987A_EC_PSH_022.dgn
squires.alvin

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-22A/CONST.22
R/W SHEET NO.	

REVISIONS

8/17/99

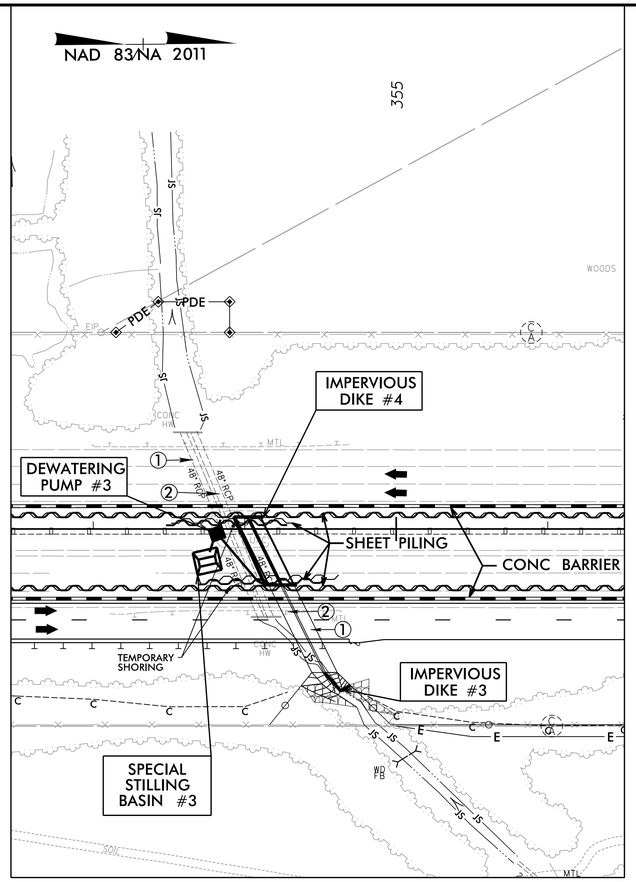


CONSTRUCTION SEQUENCE
STA. 354+06 –L–
FOR PROPOSED (2) 7′ X 7′ RCBC

EXECUTE ALL PHASES OF CONSTRUCTION IN A CONTINUOUS MANNER, AS MUCH AS PERMITTED BY TRAFFIC MANAGEMENT PLAN PHASING.

PHASE I

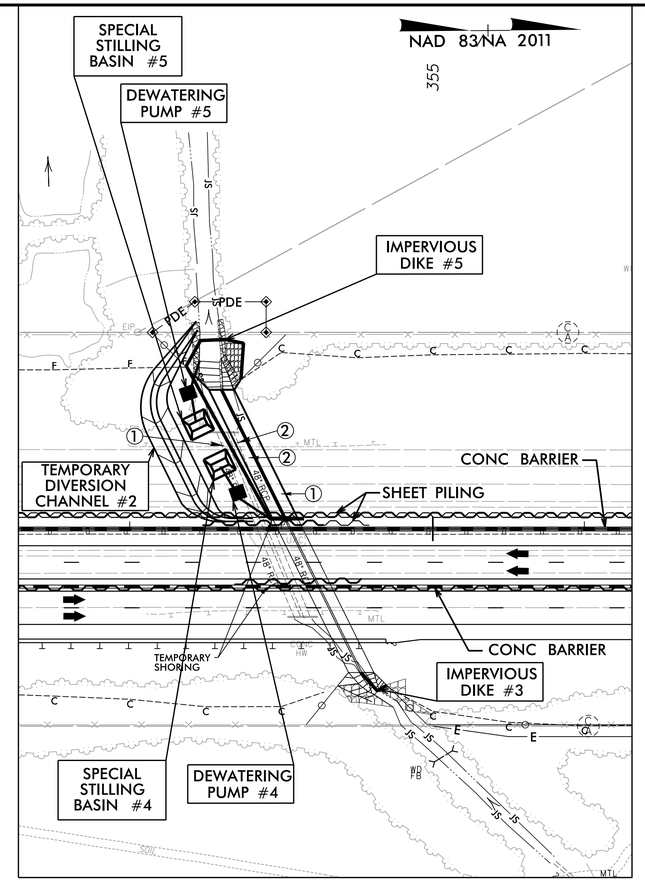
1. SHIFT NORTHBOUND TRAFFIC ONTO THE TEMPORARY PAVEMENT AS SHOWN IN THE TRAFFIC CONTROL PLANS.
2. INSTALL SHEET PILING AS SHOWN ON THE TRAFFIC CONTROL PLANS.
3. INSTALL SPECIAL STILLING BASIN #1 AND DEWATERING PUMP #1.
4. INSTALL IMPERVIOUS DIKE #1. CONSTRUCT IMPERVIOUS DIKE AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
5. CONSTRUCT TEMPORARY DIVERSION CHANNEL #1 WHILE MAINTAINING FLOW IN THE EXISTING CHANNEL.
6. MODIFY IMPERVIOUS DIKE #1 TO DIVERT FLOW INTO THE TEMPORARY DIVERSION CHANNEL #1 AND BOTH EXISTING 48" PIPES.
7. INSTALL IMPERVIOUS DIKE #2. CONSTRUCT IMPERVIOUS DIKE AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
8. INSTALL SPECIAL STILLING BASIN #2 AND DEWATERING PUMP #2.
9. CONSTRUCT THE SECTION OF THE (2) 7′ X 7′ RCBC AND HW AS SHOWN. MODIFY INLET CHANNEL AND INSTALL BANK STABILIZATION.
10. BREAK BOTH BARRELS OF THE EXISTING 48" RCP BETWEEN THE SHEET PILING.
11. MODIFY IMPERVIOUS DIKE #3 AS SHOWN IN PHASE II. MODIFY IMPERVIOUS DIKE #2 TO DIVERT FLOW OVER FROM THE NEWLY CONSTRUCTED RCBC BARREL #2 TO THE EXISTING 48" RCP #1 WEST OF THE SHEET PILING.



CONSTRUCTION SEQUENCE
STA. 354+06 –L–
FOR PROPOSED (2) 7′ X 7′ RCBC

PHASE II

1. REMOVE THE SECTION OF THE EXISTING 48" RCP #1 AND #2 EAST OF THE SHEET PILING. REMOVE THE HW AT THE INLET. MAINTAIN FLOW THROUGH THE CONSTRUCTION AREA AS THE EXISTING PIPES ARE REMOVED.
2. REMOVE TEMPORARY DIVERSION CHANNEL #1, SPECIAL STILLING BASINS #1 AND #2, AND DEWATERING PUMPS #1 AND #2.
3. CONSTRUCT THE SECTION OF THE NBL AS SHOWN ON THE TRAFFIC CONTROL PLANS AND SHIFT TRAFFIC ONTO THE NORTHBOUND LANES.
4. INSTALL SHEET PILING AS ON THE TRAFFIC CONTROL PLANS, LEAVING ENOUGH SPACE BETWEEN ROWS OF SHEET PILING TO MAINTAIN FLOW AREA OF CULVERT BARRELS.
5. INSTALL IMPERVIOUS DIKE #4, SPECIAL STILLING BASIN #3 AND DEWATERING PUMP #3.
6. CONSTRUCT SECTIONS #1 AND #2 OF THE (2) 7′ X 7′ RCBC AS SHOWN.
7. DIVERT FLOW THROUGH NEW SECTION OF BARREL #2. REMOVE IMPERVIOUS DIKE #4, SPECIAL STILLING BASIN #3 AND DEWATERING PUMP #3.
8. REMOVE THE SECTION OF THE EXISTING BARRELS #1 AND #2 BETWEEN THE SHEET PILING. MAINTAIN TEMPORARY FLOW THROUGH THE CONSTRUCTION AREA BETWEEN EXISTING BARREL #1 WEST OF THE SHEET PILING AND NEW BARREL #2.
9. CONSTRUCT THE NEWLY WESTERN SECTION OF THE NBL AND SHIFT SB TRAFFIC ON THE WESTERN SECTION OF THE NBL.



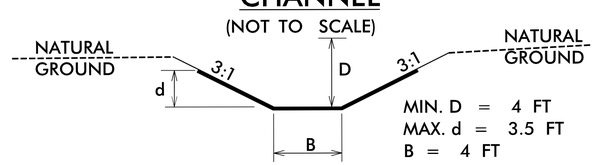
CONSTRUCTION SEQUENCE
STA. 354+06 –L–
FOR PROPOSED (2) 7′ X 7′ RCBC

PHASE III

1. INSTALL TEMPORARY DIVERSION CHANNEL #2 WHILE MAINTAINING FLOW THROUGH THE CONSTRUCTION AREA.
2. DIVERT FLOW FROM RCBC #2 INTO THE TEMPORARY DIVERSION CHANNEL #2.
3. REMOVE THE HW AT THE OUTLET AND THE REMAINING SECTION OF THE EXISTING 48" RCP PIPES.
4. INSTALL IMPERVIOUS DIKE #5. CONSTRUCT IMPERVIOUS DIKE AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
5. INSTALL SPECIAL STILLING BASINS #4 AND #5 AND DEWATERING PUMPS #4 AND #5.
6. CONSTRUCT THE REMAINING SECTION OF THE (2) 7′ X 7′ RCBC AND HW AS SHOWN. MODIFY OUTLET CHANNEL AND INSTALL BANK STABILIZATION.
7. REMOVE IMPERVIOUS DIKES #3 AND #5 AND DIVERT FLOW INTO THE NEWLY CONSTRUCTED (2) 7′ X 7′ RCBC.
8. REMOVE THE STILLING BASINS #4 AND #5, DEWATERING PUMPS #4 AND #5, AND TEMPORARY DIVERSION CHANNEL #2. STABILIZE ALL DISTURBED AREA.
9. COMPLETE ROADWAY AND SHIFT SB TRAFFIC ON THE NEWLY BUILT SECTION OF THE SBL.

TEMPORARY DIVERSION CHANNEL

(NOT TO SCALE)

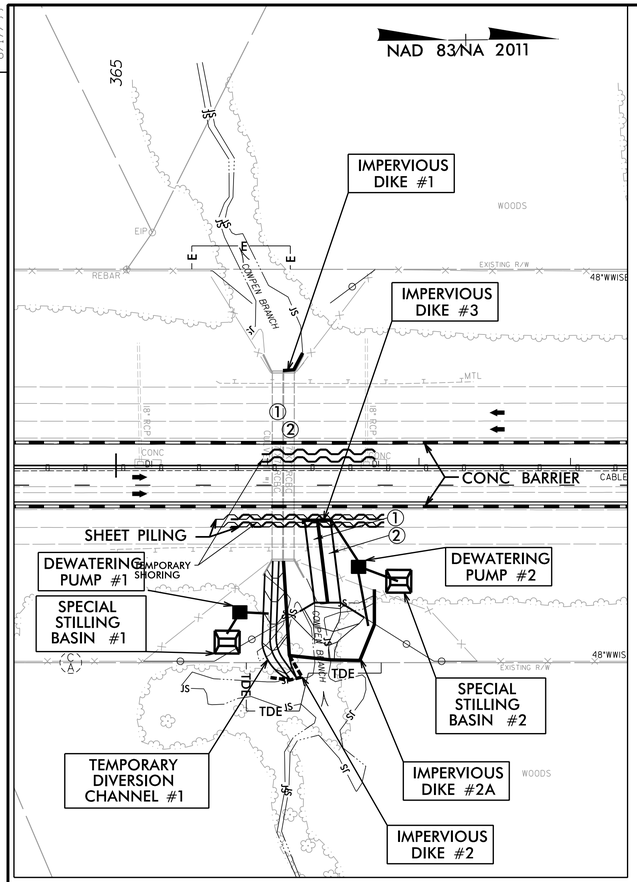


MIN. D = 4 FT
MAX. d = 3.5 FT
B = 4 FT

TYPE OF LINER = GEOTEXTILE FOR SOIL STABILIZATION

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_022A.dgn
samuel.skalla

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-22B/CONST.22
R/W SHEET NO.	

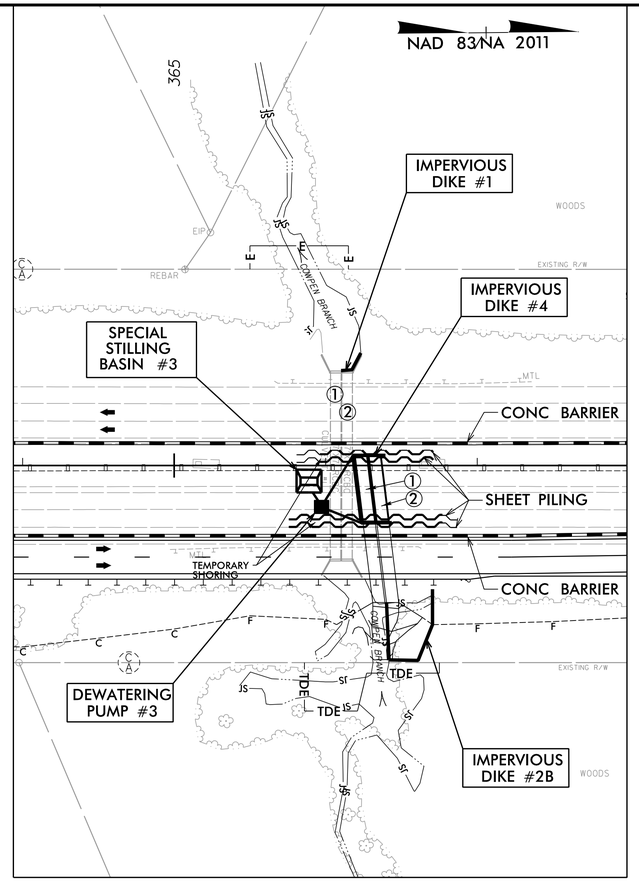


CONSTRUCTION SEQUENCE
STA. 366+29 –L–
FOR PROPOSED (2) 8′ X 9′ RCBC

EXECUTE ALL PHASES OF CONSTRUCTION IN A CONTINUOUS MANNER, AS MUCH AS PERMITTED BY TRAFFIC MANAGEMENT PLAN PHASING.

PHASE I

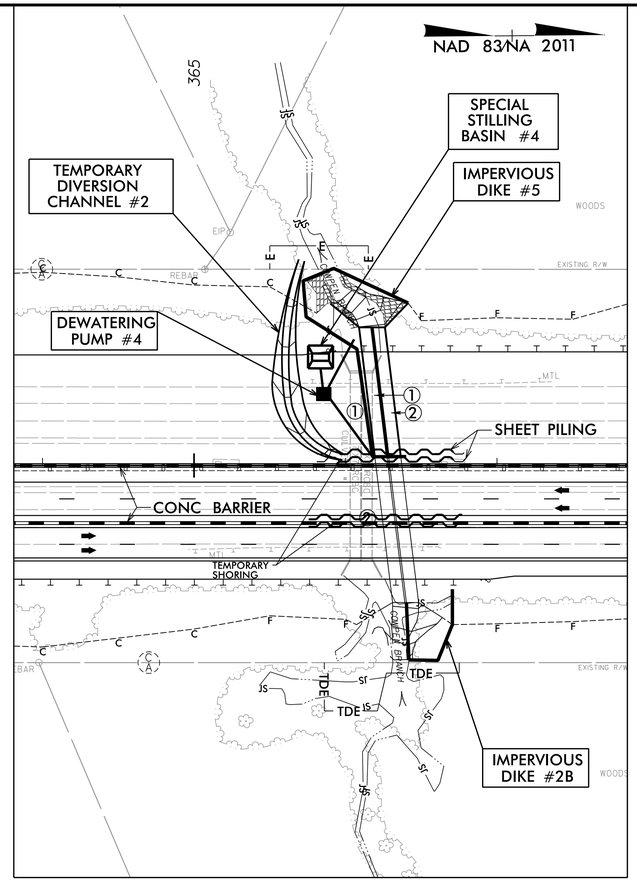
1. SHIFT NORTHBOUND TRAFFIC ONTO THE TEMPORARY PAVEMENT AS SHOWN IN THE TRAFFIC CONTROL PLANS.
2. INSTALL SHEET PILING AS SHOWN ON THE TRAFFIC CONTROL PLANS.
3. INSTALL SPECIAL STILLING BASIN #1 AND DEWATERING PUMP #1.
4. INSTALL IMPERVIOUS DIKE #2. CONSTRUCT IMPERVIOUS DIKES AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
5. CONSTRUCT TEMPORARY DIVERSION CHANNEL #1 WHILE MAINTAINING FLOW IN THE EXISTING CHANNEL.
6. CONSTRUCT IMPERVIOUS DIKES #1 AND #2A AND PARTIALLY REMOVE IMPERVIOUS DIKE #2. DIVERT FLOW INTO THE TEMPORARY DIVERSION CHANNEL #1 AND EXSTING CULVERT #1.
7. INSTALL IMPERVIOUS DIKE #3. CONSTRUCT IMPERVIOUS DIKE AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
8. INSTALL SPECIAL STILLING BASIN #2 AND DEWATERING PUMP #2.
9. CONSTRUCT THE SECTION OF THE (2) 8′ X 9′ RCBC AND HW AS SHOWN. MODIFY INLET CHANNEL AND INSTALL BANK STABILIZATION.
10. BREAK BOTH BARRELS OF THE EXISTING 7′ X7′ RCBC BETWEEN THE SHEET PILING.
11. PARTIALLY REMOVE IMPERVIOUS DIKE #2A AS SHOWN AS IMPERVIOUS DIKE #2B IN PHASE II. MODIFY IMPERVIOUS DIKE #3 TO DIVERT FLOW OVER FROM THE NEWLY CONSTRUCTED RCBC BARREL #1 TO THE EXISTING 7′ X 7′ RCBC #1 WEST OF THE SHEET PILING.



CONSTRUCTION SEQUENCE
STA. 366+29 –L–
FOR PROPOSED (2) 8′ X 9′ RCBC

PHASE II

1. REMOVE THE SECTION OF THE EXISTING 7′ X 7′ RCBC #1 AND #2 EAST OF THE SHEET PILING. REMOVE THE HW AT THE INLET. MAINTAIN FLOW THROUGH THE CONSTRUCTION AREA AS THE EXISTING PIPES ARE REMOVED.
2. REMOVE TEMPORARY DIVERSION CHANNEL #1, SPECIAL STILLING BASINS #1 AND #2, AND DEWATERING PUMPS #1 AND #2.
3. CONSTRUCT THE SECTION OF THE NBL AS SHOWN ON THE TRAFFIC CONTROL PLANS AND SHIFT TRAFFIC ONTO THE NORTHBOUND LANES.
4. INSTALL SHEET PILING AS ON THE TRAFFIC CONTROL PLANS, LEAVING ENOUGH SPACE BETWEEN ROWS OF SHEET PILING TO MAINTAIN FLOW AREA OF CULVERT BARRELS.
5. INSTALL IMPERVIOUS DIKE #4, SPECIAL STILLING BASIN #3 AND DEWATERING PUMP #3.
6. CONSTRUCT SECTIONS #1 AND #2 OF THE (2) 8′ X 9′ RCBC AS SHOWN.
7. DIVERT FLOW THROUGH NEW SECTION OF BARREL #1. REMOVE IMPERVIOUS DIKE #4, SPECIAL STILLING BASIN #3 AND DEWATERING PUMP #3.
8. REMOVE THE SECTION OF THE EXISTING BARRELS #1 AND #2 BETWEEN THE SHEET PILING. MAINTAIN TEMPORARY FLOW THROUGH THE CONSTRUCTION AREA BETWEEN EXISTING BARREL #1 WEST OF THE SHEET PILING AND NEW BARREL #1.
9. CONSTRUCT THE NEWLY WESTERN SECTION OF THE NBL AND SHIFT SB TRAFFIC ON THE WESTERN SECTION OF THE NBL.



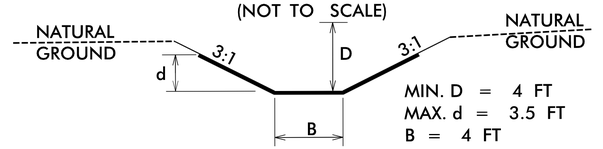
CONSTRUCTION SEQUENCE
STA. 366+29 –L–
FOR PROPOSED (2) 8′ X 9′ RCBC

PHASE III

1. INSTALL TEMPORARY DIVERSION CHANNEL #2 WHILE MAINTAINING FLOW THROUGH THE CONSTRUCTION AREA.
2. DIVERT FLOW FROM RCBC #1 INTO THE TEMPORARY DIVERSION CHANNEL #2.
3. REMOVE THE HW AT THE OUTLET AND THE REMAINING SECTIONS OF THE EXISTING (2) 7′ X 7′ RCBC.
4. INSTALL IMPERVIOUS DIKE #5. CONSTRUCT IMPERVIOUS DIKE AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
5. INSTALL SPECIAL STILLING BASIN #4 AND DEWATERING PUMP #4.
6. CONSTRUCT THE REMAINING SECTION OF THE (2) 8′ X 9′ RCBC AND HW AS SHOWN. MODIFY OUTLET CHANNEL AND INSTALL BANK STABILIZATION.
7. REMOVE IMPERVIOUS DIKES #2B AND #5 AND DIVERT FLOW INTO THE NEWLY CONSTRUCTED (2) 8′ X 9′ RCBC.
8. REMOVE THE STILLING BASIN #4, DEWATERING PUMP #4, AND TEMPORARY DIVERSION CHANNEL #2. STABILIZE ALL DISTURBED AREA.
9. COMPLETE ROADWAY AND SHIFT SB TRAFFIC ON THE NEWLY BUILT SECTION OF THE SBL.

TEMPORARY DIVERSION CHANNEL

(NOT TO SCALE)



MIN. D = 4 FT
MAX. d = 3.5 FT
B = 4 FT

TYPE OF LINER = GEOTEXTILE FOR SOIL STABILIZATION

REVISIONS

8/17/99

4/7/2022
R:\EC\Environmental\Design\15987A_EC_PSH_022B.dgn
samuel.kaplan

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE:
PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-23/CONST.23
RW SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 23

MATCHLINE –L– STA 367+00.00 SEE SHEET 22

MATCHLINE –L– STA 380+00.00 SEE SHEET 24

BRENDA B. SMITH
DB 2146 PG 260
104

ROBERT A. RUSS
DB 959 PG 223
105

CULTIVATED FIELD

WOODS

138 x 23 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
11 ft. weir
ID 23.1

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL CC

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL AA

END SBG
+68.00

48"WWISBW

15" RCP-IV

TB 2GI
2313

2312

TB 2GI
2311

TB 2GI
2310

TB 2GI
2309

CABLE

CLASS 'B' RIP RAP
EST. 3 TONS
EST. 10 SY GEOTEXTILE

TRENCHLESS INSTALLATION
18" WELDED STEEL

INV=145.31'

2308

FLOWABLE FILL

2307

TB 2GI

15" RCP-IV

TB 2GI
2306

REMOVE

-L-

N 0° 29' 38.5" E

I-95 NB 38' BST

120 x 24 x 3
ID 23.3

CLASS 'B' RIP RAP
EST. 8 TONS
EST. 21 SY GEOTEXTILE

2305

INV=145.82'

EW

30" RCP-III

2304

TB 2GI

REMOVE

INV=146.69'

15" RCP-IV

TB 2GI
2303

B

2302

TB 2GI

15" RCP-IV

FLOWABLE FILL

INV=147.81'

2301

TRENCHLESS INSTALLATION
30" WELDED STEEL

HW

B1

48"WWISBW

CFW

10'x6' CLASS 'B' RIP RAP PAD
EST. 4 TONS
EST. 16 SY GEOTEXTILE

138 x 23 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 23.2

END 47" WW FENCE
W/1SBW

47" WW FENCE
W/1SBW

SPECIAL LATERAL
6.0' BASE DITCH
SEE DETAIL AA

FALSE SUMP
SEE DETAIL HH

120 x 24 x 3
ID 23.4

PATRICIA R. THOMPSON
AND SPOUSE
DAVID M. THOMPSON
DB 1979 PG 329
103

NEILL D. FOWLER
DB 784 PG 350
WB 15-E PG 228
107
NO CLAIM

FOR –L– PROFILE SEE SHEET 62

REVISIONS

8/17/99

8/17/2022
R:\E\Environmental\Design\I5987A_EC_PSH_023.dgn
samuel.kolang

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-24/CONST.24
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

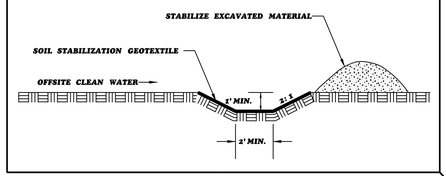
NAD 83/NA 2011

REVISIONS 8/17/99

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD

(Not to Scale)



CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 24

MATCHLINE –L– STA 380+00.00 SEE SHEET 23

MATCHLINE –L– STA 393+00.00 SEE SHEET 25

ROBERT A. RUSS
DB 959 PG 223
105

KAREN I. EVANS
DB 1886 PG 363
109

DAVID C. WHITE ET ALS
DB 931 PG 470
WB 13-E PG 346
111

NEAL C. RUSS
DB 959 PG 225
106
NO CLAIM

NEILL D. FOWLER
DB 784 PG 350
WB 15-E PG 228
107
NO CLAIM

SHIRLEY M. WARD
WB 92-E PG 266
DB 784 PG 360
108

FRANKLIN C. MELVIN AND WIFE GENEVIEVE C. MELVIN
DB 1499 PG 537
110

385

390

CULTIVATED FIELD

WOODS

HTR

45' ROAD EASEMENT

EXISTING R/W

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

CLASS 'B' RIP RAP EST. 2 TONS
25 EST. 7 SY GEOTEXTILE

BEG 47" WW FENCE W/1SBW

END 47" WW FENCE W/1SBW

FALSE SUMP SEE DETAIL HH

48"W/1SBW

TRENCHLESS INSTALLATION 24" WELDED STEEL

TRENCHLESS INSTALLATION 48" WELDED STEEL

FLOWABLE FILL

REMOVE

72" RCP

15" RCP-IV

15" RCP-III

24" RCP-III

TB 2GI

2405 2414 2413 2412 2411 2406 2407 2408 2403 2401 2402

BL-207

N 0°29'38.5" E

INV=148.48'
INV=151.37'
INV=153.67'
INV=148.94'
INV=148.86'
INV=150.81'
INV=148.25'
INV=148.44'

TEMPORARY SHORING

CFW

EW

HW

CM

18" TEMPORARY PIPE

47" WW FENCE W/1SBW

RETAIN

CLASS 'I' RIP RAP EST. 26 TONS EST. 50 SY GEOTEXTILE

120 x 24 x 3
ID 23.4

125 x 25 x 3
ID 24.1

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES", SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

FOR –L– PROFILE SEE SHEET 63

4/7/2022
K:\Projects\Environmental\Design\I5987A_EC_PSH_024.dgn
samuelskolnik

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-25/CONST.25
RW SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES", SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

8/17/99

REVISIONS

NAD 83/NA 2011

CLEAN WATER DIVERSION
CWD CWD CWD CWD
(Not to Scale)

STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
1' MIN.
2:1
2' MIN.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 25

MATCHLINE -L- STA 393+00.00 SEE SHEET 24

MATCHLINE -L- STA 406+00.00 SEE SHEET 26

155 x 31 x 3
ID 25.1

115 x 23 x 3
ID 25.2

DAVID C. WHITE ET ALS DB 93 PG 470 WB 13-E PG 346

JOSEPH G. RIDDLE AND WIFE GAIL A. RIDDLE DB 1590 PG 854

FRANKLIN G. MELVIN AND WIFE GENEVIEVE C. MELVIN DB 1499 PG 537

RAYMOND W. JONES AND WIFE MYRA W. JONES DB 1359 PG 85

18" TEMPORARY PIPE

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

END 47" WW FENCE W/1SBW

BEG 47" WW FENCE W/1SBW

47" WW FENCE W/1SBW

CA FENCE BREAK -L- STA 404+73.79 128.94 LT

CA FENCE BREAK -L- STA 405+45.00 147.45 LT

RIP RAP CL 'B' AT EMBANKMENT SEE DETAIL GG

RETAIN

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA FALSE SUMP SEE DETAIL HH

DO NOT DISTURB BILLBOARD

TRENCHLESS INSTALLATION 36" WELDED STEEL

TRENCHLESS INSTALLATION 18" WELDED STEEL

FLOWABLE FILL

REMOVE

15" RCP-IV

24" RCP

36" RCP-III

48"WW/1SBW

CLASS 'B' RIP RAP EST. 3 TONS EST. 10 SY GEOTEXTILE

CLASS 'B' RIP RAP EST. 11 TONS EST. 28 SY GEOTEXTILE

10.0' BASE DITCH SEE DETAIL JJ

SPECIAL LATERAL 6.0' BASE/DITCH SEE DETAIL AA

MATCHLINE SEE THIS SHEET

MATCHLINE SEE THIS SHEET

FOR -L- PROFILE SEE SHEET 64

A/7/2022
R:\E\Environmental\Design\I5987A_EC_PSH_025.dgn
samuel.sloan

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-26/CONST.26
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

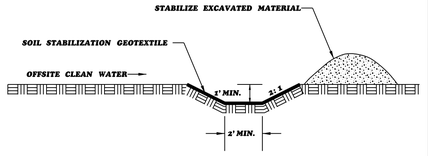
REVISIONS

8/17/99 ROW REVISION - 10/22/2021 - REVISED PROPERTY LINES TO SHOW PARCEL 115 AS PART OF PARCEL 116. REMOVED PARCEL NUMBER 115 (NOT USED)

CLEAN WATER DIVERSION

CWD CWD CWD CWD CWD

(Not to Scale)



MATCHLINE –L– STA 406+00.00 SEE SHEET 25

MATCHLINE –L– STA 419+00.00 SEE SHEET 27

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 26

161.36'
2000457
483' LT

JOSEPH G. RIDDLE AND WIFE, GAIL A. RIDDLE
DB 1590 PG 854
114

410

415

47" WW FENCE W/1SBW

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

END 47" WW FENCE W/1SBW

FALSE SUMP SEE DETAIL HH

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

115 x 23 x 3
ID 26.2

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

-L- N 0° 29' 38.5" E

I-95 SB 37' BST

I-95 NB 38' BST

GRASS

EXISTING R/W

WOODS

REMOVE 15" RCP–IV

15" RCP–IV

TB 2GI

INV=155.31

INV=154.76

FES

TEMPORARY SHORING

TRENCHLESS INSTALLATION 16" WELDED STEEL

TRENCHLESS INSTALLATION 16" WELDED STEEL

48"WWISBW

72"CHL

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

47" WW FENCE W/1SBW

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE

CLASS 'I' RIP RAP EST. 40 TONS EST. 75 SY GEOTEXTILE

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE

155 x 31 x 3
2 inch Skimmer
with 1.875 inch
Orifice Diameter
17 ft. weir
ID 26.1

110 x 22 x 3
ID 26.3

CULTIVATED FIELD

GEORGE FRANK WHITE LIFE ESTATE
DB 13E PG 288
DB 1512 PG 531
DB 175 PG 327
116

RAYMOND W. JONES AND WIFE, MYRA W. JONES
DB 1359 PG 85
113

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

FOR –L– PROFILE SEE SHEET 65
FOR DITCH DETAILS SEE SHEET 2D–3

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_026.dgn
samuel.skaug

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-27/CONST.27
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 27

REVISIONS

8/17/99

MATCHLINE –L– STA 419+00.00 SEE SHEET 26

MATCHLINE –L– STA 432+00.00 SEE SHEET 28

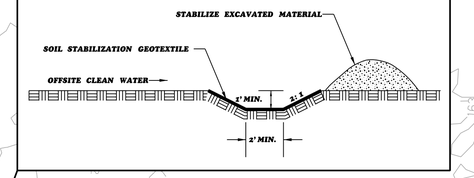
MARY JANE TUCKER HARRELL LIFE ESTATE ET ALS
DB 1810 PG 336
117
NO CLAIM

JOSEPH G. RIDDLE AND WIFE GAIL A. RIDDLE
DB 1590 PG 854
114

PALMETTO PROPERTIES, INC
DB 910 PG 351
118

-L-
PI Sta 430+68.94
△ = 3° 33' 35.7" (RT)
D = 0° 12' 03.7"
L = 1,770.78'
T = 885.67'
R = 28,500.00'
DS = 75 mph
e = NC

CLEAN WATER DIVERSION
CWD → CWD → CWD → CWD →
(Not to Scale)



168 x 28 x 3
2 inch Skimmer
with 1.875 inch
Orifice Diameter
17 ft. weir
ID 27.1

228 x 38 x 3
2.5 inch Skimmer
with 2.50 inch
Orifice Diameter
22 ft. weir
ID 27.2

-L- PC Sta. 421+83.26

BEG 47" WW FENCE W/1SBW
DO NOT DISTURB BILLBOARD
SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA
47" WW FENCE W/1SBW
END 47" WW FENCE W/1SBW
48"WW/SBW
CWD
TD
REMOVE
54" RCP-IV
15" RCP-IV
TB 2GI
CABLE
TRENCHLESS INSTALLATION 76" WELDED STEEL
TEMPORARY SHORING
EW
AC
CLASS 'I' RIP RAP EST. 33 TONS EST. 62 SY GEOTEXTILE
CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE
SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA
CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE
47" WW FENCE W/1SBW
CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE
FLOWABLE FILL
GRADE
EXISTING R/W
MON
N 0° 29' 38.5" E

CULTIVATED FIELD

GEORGE FRANK WHITE LIFE ESTATE
DB 13E PG 288
DB 1912 PG 531
DB 175 PG 327
116

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VARIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

FOR –L– PROFILE SEE SHEET 6D
FOR DITCH DETAILS SEE SHEET 2D–3

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_027.dgn
samuelskaing

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-28/CONST.28
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

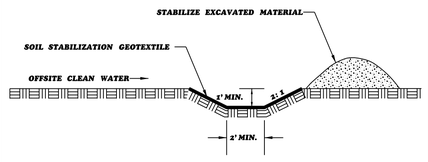
NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES" SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

-L-
PI Sta. 430+68.94
△ = 3° 33' 35.7" (RT)
D = 0° 12' 03.7"
L = 1,770.78'
T = 885.67'
R = 28,500.00'
DS = 75 mph
e = NC

REVISIONS 8/17/99

CLEAN WATER DIVERSION
CWD → CWD → CWD → CWD → CWD →
(Not to Scale)



PALMETTO PROPERTIES, INC
DB 910 PG 351
118

JOSEPH G. RIDDLE
AND WIFE,
GAIL A. RIDDLE
DB 1590 PG 865
120

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 28

MATCHLINE -L- STA 432+00.00 SEE SHEET 27

MATCHLINE -L- STA 445+00.00 SEE SHEET 29

140 x 28 x 3
ID 28.2

125 x 25 x 3
ID 28.1

-L- PT Sta. 439+54.04

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

FALSE SUMP 2.1' HIGH SEE DETAIL HH

48"WWISBW

CWD

FLOWABLE FILL

REMOVE

42" RCP-IV

24" RCP

15" RCP-IV

TB 2GI

INV=59.17'

INV=58.98'

INV=58.56'

EW

TEMPORARY SHORING

TD

CAT-I 8:1

CLASS 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE

BEG SBG +53.00

GREU TL-3 8:1

PROP.TYPE T BARRIER

N 4° 03' 14.3" E

CABLE

47" WW FENCE W/1SBW

CLASS 'B' RIP RAP
EST. 15 TONS
EST. 37 SY GEOTEXTILE

END 47" WW FENCE W/1SBW

CULTIVATED FIELD

WOODS

GEORGE FRANK WHITE LIFE ESTATE
DB 135 PG 288
DB 152 PG 531
DB 175 PG 327
116

JOSEPH G. RIDDLE
AND WIFE,
GAIL A. RIDDLE
DB 1590 PG 865
119
NO CLAIM

FOR -L- PROFILE SEE SHEET 67

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_028.dgn
smiele1skolnig

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-29/CONST 29
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

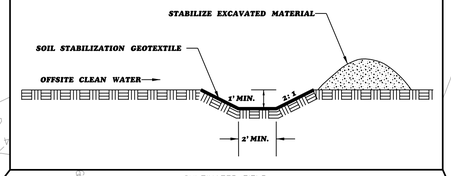
NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

CLEAN WATER DIVERSION

CWD → CWD → CWD → CWD →

(Not to Scale)



REVISIONS

ROW REVISION - 10/22/2021 - PROPERTY LINE BETWEEN PARCELS 120 & 122 HAS BEEN REVISED

8/17/99

MATCHLINE –L– STA 445+00.00 SEE SHEET 28

MATCHLINE –L– STA 458+00.00 SEE SHEET 30

JOSEPH G. RIDDLE AND WIFE GAIL A. RIDDLE DB 1590 PG 865 — 120

K.M. BIGGS, INC. MB 12 PG 100 MB 48 PG 98 — 122

JOSEPH G. RIDDLE AND WIFE GAIL A. RIDDLE DB 1590 PG 865 — 119 NO CLAIM

K.M. BIGGS, INC. MB 12 PG 100 MB 48 PG 98 — 121

CULTIVATED FIELD

WOODS

EXISTING R/W

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 29

FALSE SUMP 1.6' HIGH SEE DETAIL HH

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

48"WWSBW

RIP RAP AT EMBANKMENT SEE DETAIL GG

120 x 22 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 10 ft. weir ID 29.1

L 454+90 2@8'x7' RCBC WITH BEVELED HEADWALL BURIED 1' 1' SILL ON NORTH BARREL 2' SILL ON SOUTH BARREL WITH 1' FLOOD BENCH

18 LF OF CHANNEL IMPROVEMENT WITH 1' FLOOD BENCH AT SOUTH BARREL EST. 2 TONS CLASS I RIPRAP EST. 5 SY GEOTEXTILE SEE DETAIL PP

BEG 47" WW FENCE W/1SBW

47" WW FENCE W/1SBW

REMOVE EXISTING 54" TO 72" RCP AND HEADWALL

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

RIP RAP AT EMBANKMENT SEE DETAIL GG

REMOVE FENCE

CLASS 'B' RIP RAP EST. 3 TONS EST. 10 SY GEOTEXTILE

CONFEN BRANCH

N 10°05'14.3" E

15" RCP-IV

18" RCP-IV

24" RCP-IV

30" RCP-IV

36" RCP-IV

TB 2GI

CFW

SKEW=130°

INV=154.83

INV=155.26

INV=154.76

INV=158.62

FLOWABLE FILL

TRENCHLESS INSTALLATION 16" WELDED STEEL

BEG SBG +43.00

END SBG +59.00

TEMPORARY SHORING

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE

120 x 22 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 10 ft. weir ID 29.2

BEG 47" WW FENCE W/1SBW

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE

END 47" WW FENCE W/1SBW

CLASS 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE

BEG 47" WW FENCE W/1SBW

32 LF OF CHANNEL IMPROVEMENT WITH 1' FLOOD BENCH AT SOUTH BARREL EST. 2 TONS CLASS I RIPRAP EST. 5 SY GEOTEXTILE SEE DETAIL QQ

FILL CHANNEL WITH CLASS II RIPRAP TO ELEV=154.0' EST. 10 TONS CLASS II RIPRAP

EST. 22 TONS CLASS I RIPRAP EST. 35 SY GEOTEXTILE

RIP RAP AT EMBANKMENT SEE DETAIL GG

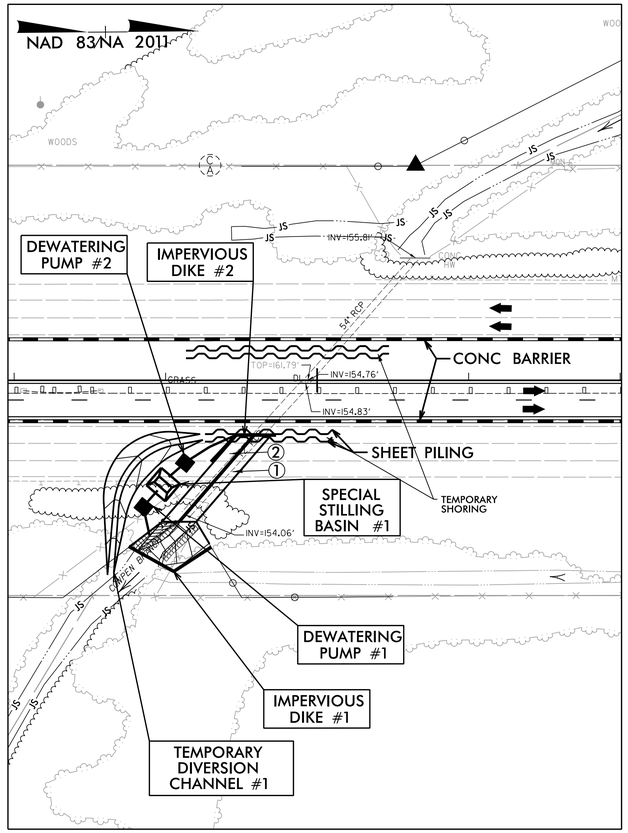
END 47" WW FENCE W/1SBW

FOR –L– PROFILE SEE SHEET 68
FOR DITCH DETAILS SEE SHEET 2D-3

4/7/2022
R:\Environmental\Design\15987A_EC_PSH_029.dgn
jamie.sloan

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-29A/CONST.29
R/W SHEET NO.	

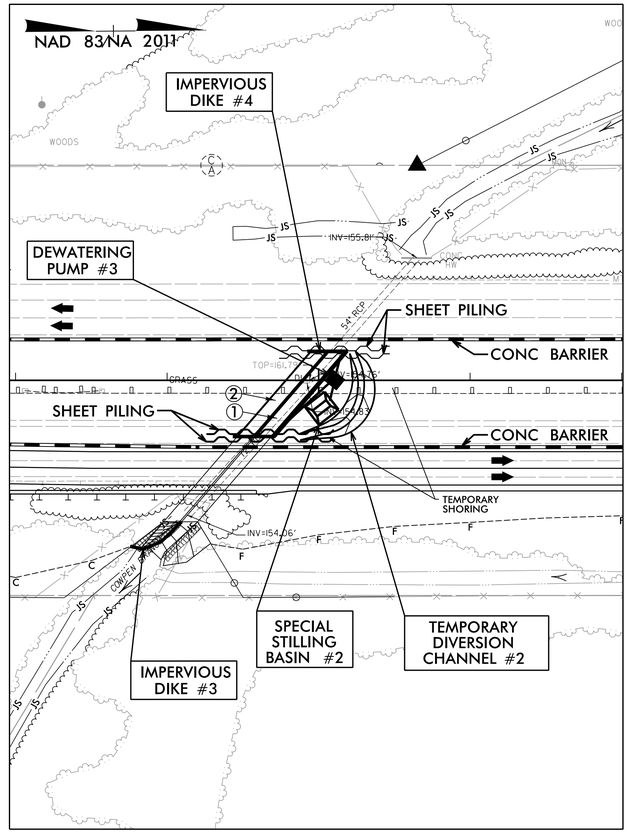


CONSTRUCTION SEQUENCE
STA. 454+90 –L–
FOR PROPOSED (2) 8' X 7' RCBC

EXECUTE ALL PHASES OF CONSTRUCTION IN A CONTINUOUS MANNER, AS MUCH AS PERMITTED BY TRAFFIC MANAGEMENT PLAN PHASING.

PHASE I

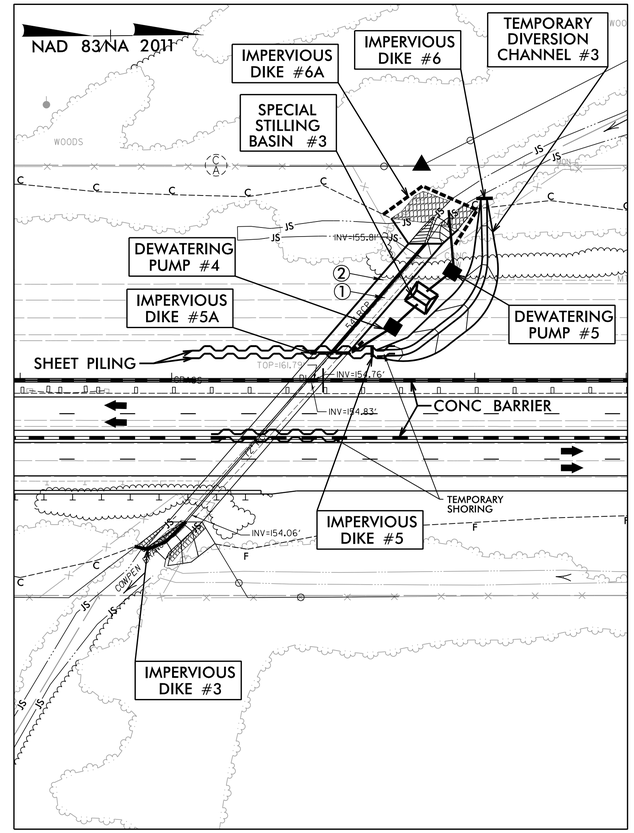
1. SHIFT NORTHBOUND TRAFFIC ONTO THE TEMPORARY PAVEMENT AS SHOWN IN THE TRAFFIC CONTROL PLANS.
2. INSTALL SHEET PILING AS SHOWN ON THE TRAFFIC CONTROL PLANS, LEAVING ENOUGH SPACE BETWEEN ROWS OF SHEET PILING TO MAINTAIN FLOW AREA OF CULVERT BARRELS.
3. CONSTRUCT TEMPORARY DIVERSION CHANNEL #1 WHILE MAINTAINING FLOW IN THE EXISTING CHANNEL AND EXISTING 72" RCP.
4. INSTALL IMPERVIOUS DIKE #1 AND #2. CONSTRUCT IMPERVIOUS DIKE AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
5. INSTALL SPECIAL STILLING BASIN #1 AND DEWATERING PUMP #1.
6. BREAK THE EXISTING 72" RCP AND DIVERT FLOW INTO THE TEMPORARY DIVERSION CHANNEL #1.
7. REMOVE THE EXISITNG 72" RCP AND CONSTRUCT THE SECTION OF THE (2) 8' X 7' RCBC, DOWNSTREAM HW, OUTLET CHANNEL AND INSTALL BANK STABILIZATION.
8. REMOVE IMPERVIOUS DIKES #1 AND #2, AND INSTALL IMPERVIOUS DIKE #3 AS SHOWN IN PHASE II. DIVERT FLOW INTO THE NEWLY CONSTRUCTED SECTION #1 OF THE RCBC.
9. REMOVE TEMPORARY DIVERSION CHANNEL #1, SPECIAL STILLING BASIN #1, AND DEWATERING PUMPS #1 AND #2.
10. COMPLETE NBL ROADWAY AND SHIFT NB TRAFFIC ONTO THE NEWLY CONSTRUCTED NB SECTION.



CONSTRUCTION SEQUENCE
STA. 454+90 –L–
FOR PROPOSED (2) 8' X 7' RCBC

PHASE II

1. INSTALL SHEET PILING AS ON THE TRAFFIC CONTROL PLANS, LEAVING ENOUGH SPACE BETWEEN ROWS OF SHEET PILING TO MAINTAIN FLOW AREA OF CULVERT BARRELS.
2. CONSTRUCT TEMPORARY DIVERSION CHANNEL #2 WHILE MAINTAINING FLOW IN THE EXISITNG 54"/72" RCP'S.
3. INSTALL IMPERVIOUS DIKE #4. CONSTRUCT IMPERVIOUS DIKE AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS. INSTALL SPECIAL STILLING BASIN #2 AND DEWATERING PUMP #3.
4. BREAK THE EXISTING 54" RCP AND DIVERT FLOW INTO THE TEMPORARY DIVERSION CHANNEL #2.
5. REMOVE THE EXISTING 54" RCP & 72" RCP LOCATED BETWEEN THE INTERIOR SHEET PILINGS.
6. CONSTRUCT SECTIONS #1 AND #2 OF THE (2) 8' X 7' RCBC AS SHOWN.
7. REMOVE IMPERVIOUS DIKE #4 AND DIVERT FLOW THROUGH NEW SECTION OF BARREL #1.
8. REMOVE TEMPORARY DIVERSION CHANNEL #2, SPECIAL STILLING BASIN #2, AND DEWATERING PUMP #3.
9. CONSTRUCT THE WESTERN SECTION OF THE NBL AS SHOWN ON THE TRAFFIC CONTROL PLANS AND SHIFT SB TRAFFIC ONTO THE WESTERN NORTHBOUND LANES.



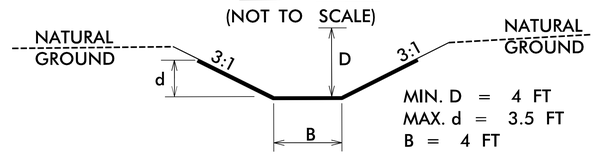
CONSTRUCTION SEQUENCE
STA. 454+90 –L–
FOR PROPOSED (2) 8' X 7' RCBC

PHASE III

1. INSTALL IMPERVIOUS DIKES #5 AND #6.
2. CONSTRUCT TEMPORARY DIVERSION CHANNEL #3 WHILE MAINTAINING FLOW IN THE EXISTING 54" RCP AND THE NEWLY CONSTRUCTED SECTION #1 OF THE RCBC.
3. REMOVE IMPERVIOUS DIKES #5 AND #6 AND DIVERT WATER INTO TEMPORARY DIVERSION CHANNEL #3.
4. INSTALL IMPERVIOUS DIKES #5A AND #6A. CONSTRUCT IMPERVIOUS DIKES AT AN ELEVATION TO OVERTOP DURING HIGH STREAM LEVELS.
5. INSTALL SPECIAL STILLING BASIN #3, AND DEWATERING PUMPS #4 AND #5.
6. REMOVE THE EXISTING 54" RCP AND HW.
7. CONSTRUCT THE REMAINING SECTION OF THE (2) 8' X 7' RCBC, HW, AND INSTALL BANK STABILIZATION AS SHOWN.
8. REMOVE IMPERVIOUS DIKES #5A AND #6A AND DIVERT FLOW INTO THE NEWLY CONSTRUCTED RCBC. STABILIZE ALL DISTURBED AREA.
9. REMOVE TEMPORARY DIVERSION CHANNEL #3, SPECIAL STILLING BASIN #3, AND DEWATERING PUMPS #4 AND #5.
10. COMPLETE ROADWAY AND SHIFT SB TRAFFIC ON THE NEWLY BUILT SECTION OF THE SBL.

TEMPORARY DIVERSION CHANNEL

(NOT TO SCALE)



MIN. D = 4 FT
MAX. d = 3.5 FT
B = 4 FT

TYPE OF LINER = GEOTEXTILE FOR SOIL STABILIZATION

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_029A.dgn
samuel.skalnik

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-30/CONST.30
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES" SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

MATCHLINE –Y3– STA 24+00.00 SEE SHEET 38

MATCHLINE –L– STA 458+00.00 SEE SHEET 29

MATCHLINE –L– STA 472+00.00 SEE SHEET 31

MATCHLINE –Y3– STA 36+00.00 SEE SHEET 39

MARGARET R. RUSS DB 1599 PG 85 DB 2004 PG 69

K.M. BIGGS, INC. MB 12 PG 100 MB 48 PG 98

JOSEPH A. RUSS DB 1590 PG 85

145 120 122 123 121

3.0' LATERAL BASE DITCH SEE DETAIL FF

RIP RAP AT EMBANKMENT SEE DETAIL GG

EST. 24 TONS CLASS I RIPRAP EST. 35 SY GEOTEXTILE

REMOVE EXISTING 72" CMP

25 LF OF CHANNEL IMPROVEMENT WITH 1' FLOOD BENCH AT NORTH BARREL EST. 2 TONS CLASS I RIPRAP EST. 5 SY GEOTEXTILE SEE DETAIL RR

CLASS 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE

Y3 24+79 2@8'x7' RCBC WITH BEVELED HEADWALL BURIED 1' 1' SILL ON SOUTH BARREL 2' SILL ON NORTH BARREL WITH 1' FLOOD BENCH

W2 ELBOWS

END WW FENCE

47" WW FENCE W/1SBW

TEMPORARY SHORING

BEG WW FENCE

REMOVE EXISTING 72" RCP & HEADWALL

EST. 56 TONS CLASS I RIPRAP EST. 82 SY GEOTEXTILE

RETAIN

N 44°06'19.0" E

FUNNEL DRAIN FOOTID APPROX. LOCATION

60 LF OF CHANNEL IMPROVEMENT WITH 1' FLOOD BENCH AT NORTH BARREL EST. 4 TONS CLASS I RIPRAP EST. 6 SY GEOTEXTILE SEE DETAIL SS

REMOVE FENCE

48"WW/SBW

FILL HOLE WITH NATIVE MATERIAL SEE DETAIL AA EST. 34 CY

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

CLASS 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE

END SBG +41.99

END SBG +10.58

BEGIN APP SLAB 28+58.25
BEGIN BRIDGE AT FF 28+71.69

CONC BARRIER WALL

FLOWABLE FILL

SINGLE FACE BARRIER

BARRIER TRANSITION SECTION

24" RCP-IV

15" RCP-IV

END 47" WW FENCE W/1SBW

END BRIDGE AT FF 31+36.53
END APP SLAB 31+49.97

BEG 47" WW FENCE W/1SBW

BEG SBG +94.17

BEG SBG +33.71

END SBG +74.50

BEG 47" WW FENCE W/1SBW

MSE RETAINING WALL

CLASS 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE

CONCRETE DITCH BEHIND RETAINING WALL (TYP) SEE DETAIL II

-L- POT Sta. 463+53.11
-Y3- POT Sta. 30+04.11
Δ = 139° 56' 55"

+10-Y3- 120'

+75-Y3- 120'

10'X6' CLASS 'B' RIP RAP PAD EST. 4 TONS EST. 16 SY GEOTEXTILE

126 x 21 x 3
ID 30.1

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

TRENCHLESS INSTALLATION 30" WELDED STEEL

-L- N 4°03'14.3" E

TB 2GI REMOVE

FLOWABLE FILL

CONCRETE DITCH BEHIND RETAINING WALL (TYP) SEE DETAIL II

10'X6' CLASS 'B' RIP RAP PAD EST. 4 TONS EST. 16 SY GEOTEXTILE

CLASS 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE

END SBG +85.00

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA HW

W2 ELBOWS

RIP RAP AT EMBANKMENT SEE DETAIL GG -Y3- PC Sta. 34+04.73

CLASS 'B' RIP RAP EST. 8 TONS EST. 21 SY GEOTEXTILE

140 x 28 x 3
ID 30.2

Excavate Proposed Ditch according to Detail FF from Sta. 34+05 to Sta. 38+50

CLASS 'B' RIP RAP EST. 5 TONS EST. 14 SY GEOTEXTILE

BEG 47" WW FENCE W/1SBW

CLASS 'BI' RIP RAP EST. 15 TONS EST. 37 SY GEOTEXTILE

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE

3.0' LATERAL BASE DITCH SEE DETAIL FF

TEMPORARY SHORING

-DRI- POT Sta. 10+00.00

BEGIN CONSTRUCTION -DRI- Sta. 10+10.00

N 45° 57' 00.0" E

-DRI- PC Sta. 10+56.89

-Y3-
PI Sta 36+29.63
Δ = 5° 15' 21.3" (RT)
D = 1° 10' 09.5"
L = 449.49'
T = 224.90'
R = 4,900.00'
DS = 60 mph
e = 03
RO = 75'

-DRI-
PI Sta 11+25.86
Δ = 89° 09' 07.8" (LT)
D = 81° 51' 04.0"
L = 108.92'
T = 68.97'
R = 70.00'

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 30

PROPOSED PAVEMENT REMOVAL
FOR –L– PROFILE SEE SHEET 69
FOR –Y3– PROFILE SEE SHEET 89
FOR –DR1– PROFILE SEE SHEET 90
FOR DITCH DETAILS SEE SHEET 2D-3

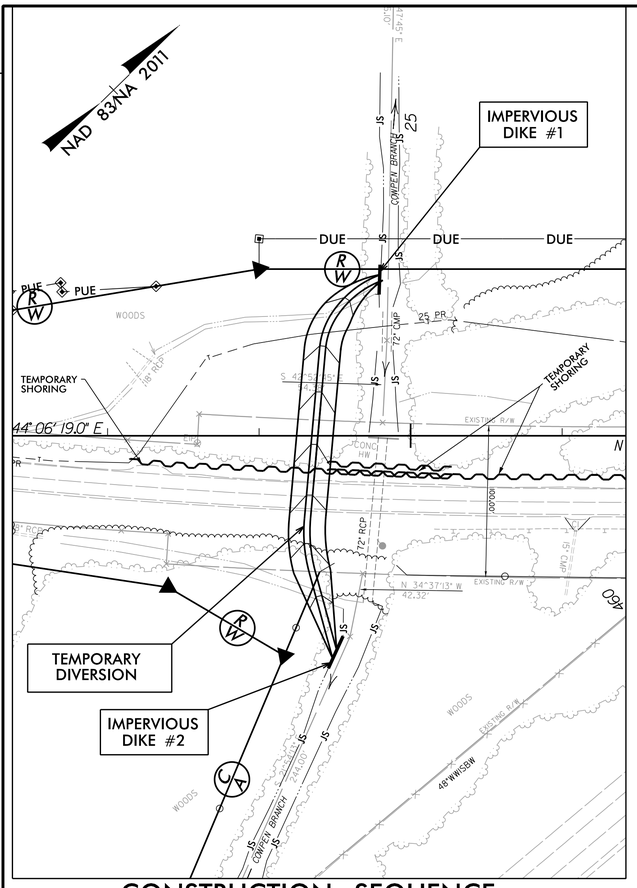
REVISIONS
8/17/99
ROW REVISION - 10/22/2021 - PROPERTY LINE BETWEEN PARCELS 120 & 122 HAS BEEN REVISED

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_030.dgn
samuelskaling

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-30A/CONST.30
R/W SHEET NO.	

REVISIONS

8/17/99



CONSTRUCTION SEQUENCE
STA. 24+79 –Y3–
FOR PROPOSED (2) 8′ X 7′ RCBC

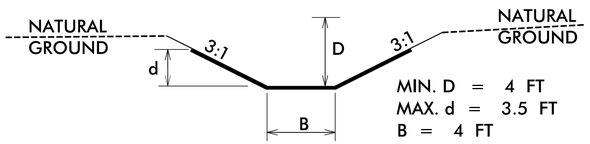
EXECUTE ALL PHASES OF CONSTRUCTION IN A CONTINUOUS MANNER, AS MUCH AS PERMITTED BY TRAFFIC MANAGEMENT PLAN PHASING.

PHASE I

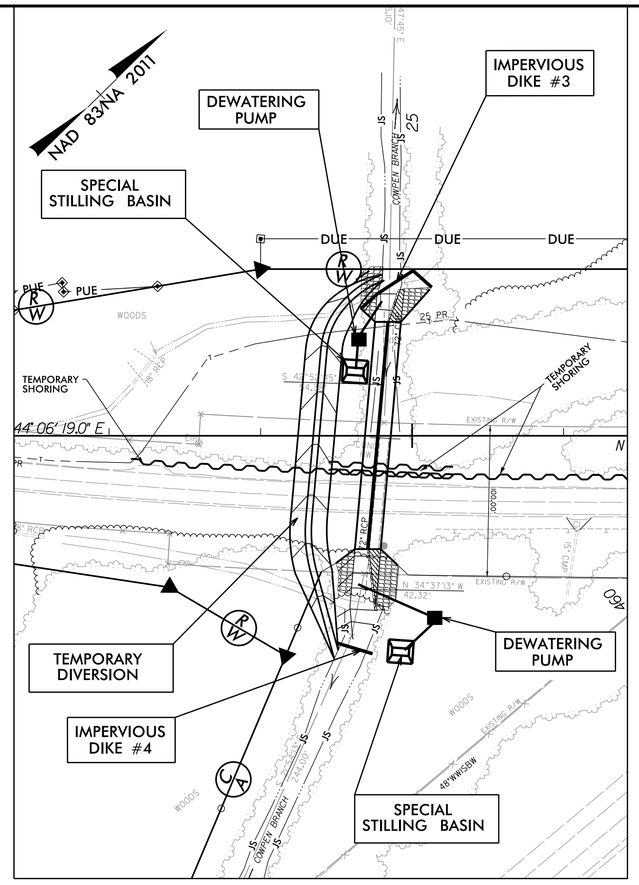
1. INSTALL IMPERVIOUS DIKES #1 AND #2.
2. CONSTRUCT TEMPORARY DIVERSION CHANNEL WHILE MAINTAINING FLOW IN THE EXISTING 72″ RCP AND CHANNEL.

TEMPORARY DIVERSION CHANNEL

(NOT TO SCALE)



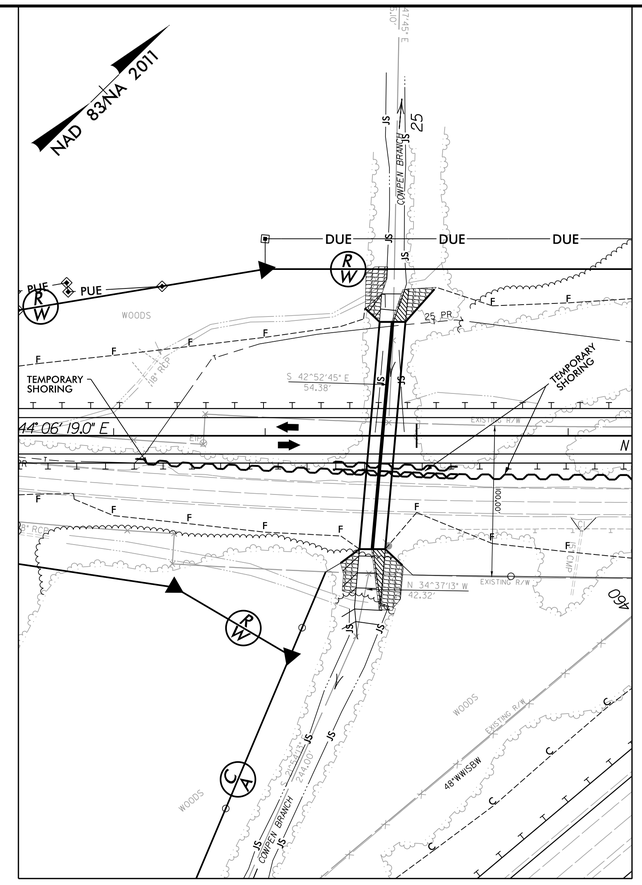
TYPE OF LINER = GEOTEXTILE FOR SOIL STABILIZATION



CONSTRUCTION SEQUENCE
STA. 24+79 –Y3–
FOR PROPOSED (2) 8′ X 7′ RCBC

PHASE II

1. INSTALL SPECIAL STILLING BASINS AND DEWATERING PUMPS.
2. REMOVE IMPERVIOUS DIKES #1 AND #2 CONSTRUCTED IN PHASE I AND DIVERT FLOW INTO THE NEWLY CONSTRUCTED DIVERSION CHANNEL.
3. INSTALL IMPERVIOUS DIKES #3 AND #4.
4. REMOVE THE EXISTING 72″ RCP.
5. CONSTRUCT THE (2) 8′ X 7′ RCBC AND HEADWALLS.
6. CONSTRUCT THE INLET AND OUTLET CHANNELS AND INSTALL BANK STABILIZATION.



CONSTRUCTION SEQUENCE
STA. 24+79 –Y3–
FOR PROPOSED (2) 8′ X 7′ RCBC

PHASE III

1. REMOVE IMPERVIOUS DIKES #3 AND #4 CONSTRUCTED IN PHASE II.
2. DIVERT FLOW INTO THE NEWLY CONSTRUCTED (2) 8′ X 7′ RCBC.
3. REMOVE DIVERSION CHANNEL.
4. REMOVE SPECIAL STILLING BASINS AND DEWATERING PUMPS.
5. STABILIZE ALL DISTURBED AREAS.
6. COMPLETE ROADWAY.

4/7/2022
R:\Environmental\Design\15987A_EC_PSH_030A.dgn
Samuel.Jackson

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-31/CONST.31
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

REVISIONS

8/17/99

NAD 83/NA 2011

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 31

MATCHLINE –L– STA 472+00.00 SEE SHEET 30

MATCHLINE –L– STA 486+00.00 SEE SHEET 32

K.M. BIGGS, INC. MB 12 PG 100 — 123 — NO CLAIM

JOHN B. BUNN ET ALS WB 08-E PG 000 MB 43 PG 144 — 126 — NO CLAIM

TOMMY BLANKS DB 792 PG 442 — 127 — NO CLAIM

K.M. BIGGS, INC. MB 12 PG 108 MB 48 PG 98 — 124

JOHN B. BUNN ET ALS WB 08-E PG 000 MB 43 PG 144 — 125

120 x 20 x 3
ID 31.1

108 x 18 x 3
ID 31.2

SPECIAL LATERAL 6.0' BASE DITCH SEE DETAIL AA

FALSE SUMP SEE DETAIL HH

FALSE CUT 6.0' BASE DITCH SEE DETAIL DD

FALSE SUMP SEE DETAIL HH

48"WWISBW

TRENCHLESS INSTALLATION 24" WELDED STEEL

FLOWABLE FILL

REMOVE

30" RCP-IV

15" RCP-IV

TB 2GI

HW

TD

-L- N 4°03'14.3" E

CLASS 'B' RIP RAP EST. 8 TONS EST. 21 SY GEOTEXTILE

CLASS 'B' RIP RAP EST. 5 TONS EST. 14 SY GEOTEXTILE

BEG 47" WW FENCE W/1SBW

END 47" WW FENCE W/1SBW

5.0' BASE DITCH SEE DETAIL JJ

WOODS

CULTIVATED FIELD

EXISTING R/W

TRASH PILE

POND WE=162.7'

CABLE

I-85 NB 37' BST

I-85 SB 38' BST

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES",SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

FOR –L– PROFILE SEE SHEET 70

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_031.dgn
samuelsaiyo

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-32/CONST.32
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 32

END TIP PROJECT I-5987A
-L- POT Sta. 495+00.00
BEGIN TIP PROJECT I-5987B
-L- POT Sta. 495+00.00

MATCHLINE -L- STA 486+00.00 SEE SHEET 31

REVISIONS

8/17/99

TOMMY BLANKS
DB 792 PG 442
127
NO CLAIM

150 x 30 x 3
ID 32.1

FALSE SUMP
SEE DETAIL HH

SPECIAL LATERAL
6' BASE DITCH
SEE DETAIL AA

EXISTING R/W

48"WWISBW

FES
INV=160.41'

INV=160.43'
INV=160.47'

CABLE

TB 2GI
15" RCP-IV
3202
3203
3205
3206
3207

REMOVE

-L- N 4°03'14.3" E

FLOWABLE FILL

INV=165.92'

TRENCHLESS INSTALLATION
16" WELDED STEEL

CLASS 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE

150 x 25 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
14 ft. weir
ID 32.2

INV=159.97'

JOHN B. BUNN
ET ALS
WB 08-E PG 000
MB 43 PG 144
125

JOSEPH G. RIDDLE
AND WIFE
GAIL A. RIDDLE
DB 7H PG 214
WB 13-E PG 348

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES",SEE EC-3.

NOTE:
PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

FOR -L- PROFILE SEE SHEET 71

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_032.dgn
Samuel.Scalia

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-33/CONST.33
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 33

NAD 83/NA 2011

MATCHLINE –Y2– STA. 25+00 SEE SHEET 13

BEGIN CONSTRUCTION
-Y2- POT Sta. 12+15.00

-Y2- PC Sta. 13+36.02

S 57° 44' 16.4" E

-DR2- POT Sta. 11+85.49
-Y2- POC Sta. 20+19.78

-DR9- POT Sta. 11+75.00

END CONSTRUCTION
-DR9- POT Sta. 11+71.00

-Y2- PT Sta. 21+46.87

-DR3- PT
Sta. 16+41.60

N 2° 40' 07.6" W

-DR3- PC Sta. 15+32.39

N 87° 56' 21.9" E

N 1° 31' 20.8" W

BEGIN CONSTRUCTION
-DR2- POT Sta. 10+35.00

-DR2- POT Sta. 10+00.00

-DR9- POT Sta. 10+00.00
-DR3- POT Sta. 16+69.90
-Y2- POT Sta. 22+04.00

TIMOTHY BELL
DB 1782 PG 365

ERNESTINE PARKER
DB 640 PG 734
MB 29 PG 149

ARCHIE PREVATTEE
DB 756 PG 399

PAULA CAULDER
DB 2121 PG 370

RACHEL ESTHER PAUL PRIDGEN, ET AL
DB 640 PG 728

LARRY PRIDGEN & RACHEL PRIDGEN
DB 1802 PG 240
MB 29 PG 149

LARRY PRIDGEN & RACHEL PRIDGEN
DB 640 PG 728
MB 29 PG 149

LOW FLOW CHANNEL & FLOOD PLAIN BENCH SEE DETAIL AI

30 LF OF CHANNEL IMPROVEMENTS

CLASS 'I' RIP RAP
EST. 36 TONS
EST. 64 SY GT
RIP RAP BANKS ONLY

RIP RAP AT EMBANKMENT SEE DETAIL L

100 x 17 x 3
1.5 inch Skimmer with 1.125 inch Orifice Diameter
6 ft. weir
ID 33.2

SPECIAL LATERAL V DITCH SEE DETAIL P

SPECIAL LATERAL V DITCH SEE DETAIL AF

48" RCP–IV
BURY BOTH ENDS OF PIPES 0.8 FT

TEMPORARY SHORING SEE TMP

35 LF OF CHANNEL IMPROVEMENTS

CLASS 'I' RIP RAP
EST. 52 TONS
EST. 100 SY GT
RIP RAP BANKS ONLY

LOW FLOW CHANNEL & FLOOD PLAIN BENCH SEE DETAIL AI

LATERAL V DITCH SEE DETAIL AD

CLASS 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GT

15" CSP W/ELBOWS

15" RCP–IV

8:1 TAPER

SPECIAL LATERAL V DITCH SEE DETAIL G

75' TRANSITION

REMOVE

-Y2-

-DR2-

-DR3-

-Y2-
PI Sta 17+54.49
Δ = 34° 55' 51.3" (LT)
D = 4° 18' 28.6"
L = 810.85'
T = 418.47'
R = 1,330.00'
DS = 60 mph
e = 06
RO = 150.00'

-DR3-
PI Sta 16+01.65
Δ = 89° 23' 31.4" (RT)
D = 81° 51' 04.0"
L = 109.21'
T = 69.26'
R = 70.00'

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES" SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

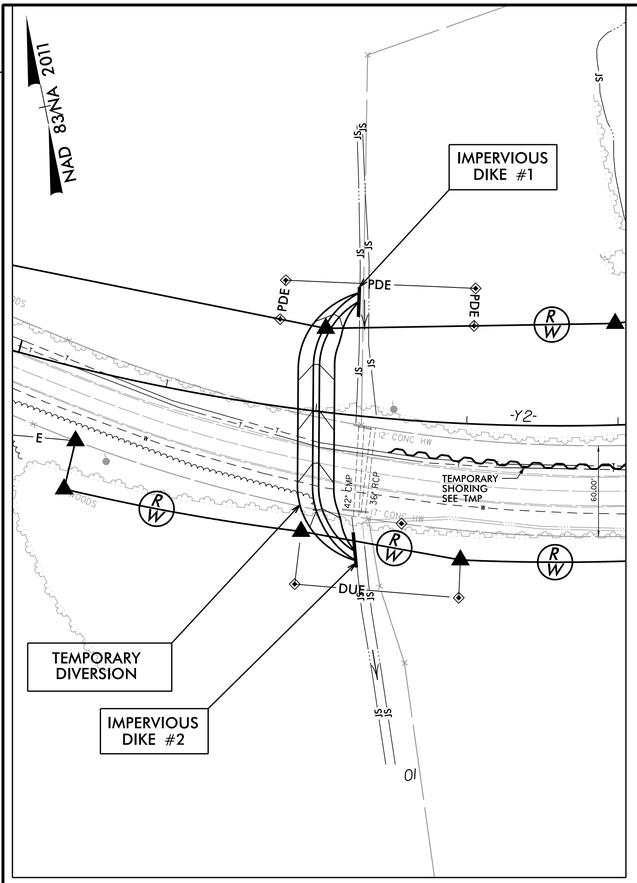
PROPOSED ROCK PLATING
STEEPEN SLOPE FROM –Y2– STA. 22+50.00 TO 27+00.00 RT. (SEE CROSS SECTIONS)
SEE DETAIL SHEET 2G–x FOR ROCK PLATING
ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED.
UNIFORMLY TRANSITION DRIVEWAY SLOPES AS SHOWN.
FOR –Y2– PROFILE SEE SHEET 72
FOR –DR2– PROFILE SEE SHEET 91
FOR –DR3– PROFILE SEE SHEET 91
FOR DITCH DETAILS SEE SHEETS 2D–1 AND 2D–2

4/7/2022
R:\Projects\Commercial\Design\I5987A_EC_PSH_033.dgn
samuel.lakey

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-33A/CONST.33
R/W SHEET NO.	

REVISIONS

8/17/99



CONSTRUCTION SEQUENCE
STA. 17 + 30 –Y2–
FOR PROPOSED (2) 48" RCP–IV

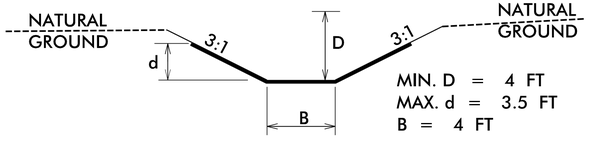
EXECUTE ALL PHASES OF CONSTRUCTION IN A CONTINUOUS MANNER, AS MUCH AS PERMITTED BY TRAFFIC MANAGEMENT PLAN PHASING.

PHASE I

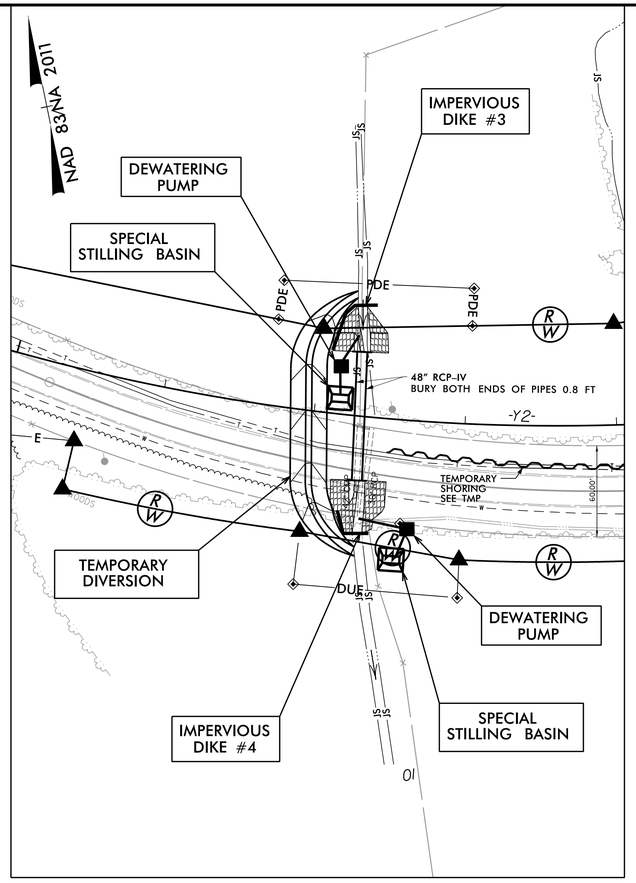
1. INSTALL IMPERVIOUS DIKES #1 AND #2.
2. CONSTRUCT TEMPORARY DIVERSION CHANNEL WHILE MAINTAINING FLOW IN THE EXISTING 42" CMP & 36" RCP AND CHANNEL.

TEMPORARY DIVERSION CHANNEL

(NOT TO SCALE)



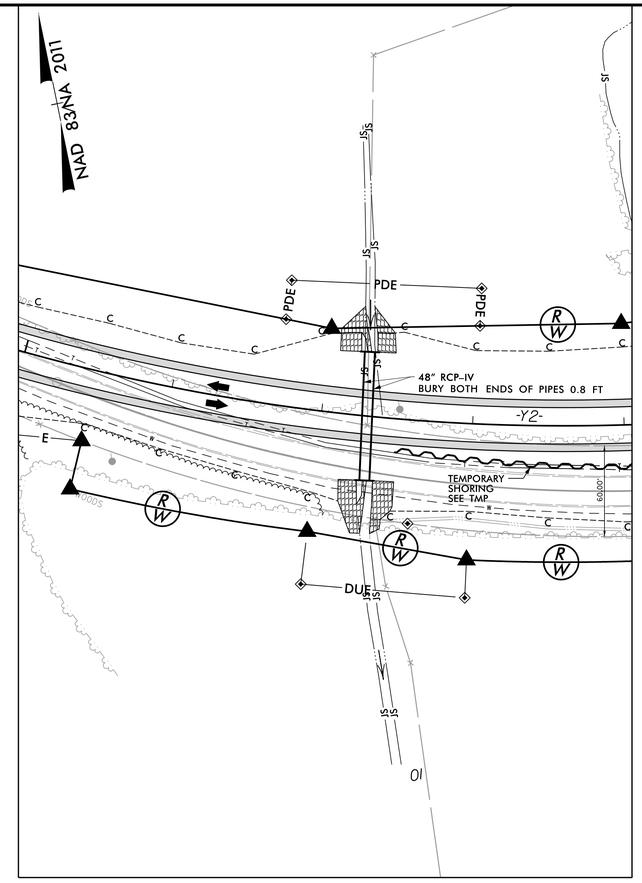
TYPE OF LINER = GEOTEXTILE FOR SOIL STABILIZATION



CONSTRUCTION SEQUENCE
STA. 17 + 30 –Y2–
FOR PROPOSED (2) 48" RCP–IV

PHASE II

1. INSTALL SPECIAL STILLING BASINS AND DEWATERING PUMPS.
2. REMOVE IMPERVIOUS DIKES #1 AND #2 CONSTRUCTED IN PHASE I AND DIVERT FLOW INTO THE NEWLY CONSTRUCTED DIVERSION CHANNEL.
3. INSTALL IMPERVIOUS DIKES #3 AND #4.
4. REMOVE THE EXISTING 42" CMP & 36" RCP.
5. CONSTRUCT THE (2) 48" RCP–IV AND HEADWALLS.
6. CONSTRUCT THE INLET AND OUTLET CHANNELS AND INSTALL BANK STABILIZATION.



CONSTRUCTION SEQUENCE
STA. 17 + 30 –Y2–
FOR PROPOSED (2) 48" RCP–IV

PHASE III

1. REMOVE IMPERVIOUS DIKES #3 AND #4 CONSTRUCTED IN PHASE II.
2. DIVERT FLOW INTO THE NEWLY CONSTRUCTED (2) 48" RCP–IV.
3. REMOVE DIVERSION CHANNEL.
4. REMOVE SPECIAL STILLING BASINS AND DEWATERING PUMPS.
5. STABILIZE ALL DISTURBED AREAS.
6. COMPLETE ROADWAY.

4/7/2022
R:\Environmental\Design\15987A_EC_PSH_033A.dgn
Jamie.Hicklin

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-34/CONST.34
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

-Y2-

PI Sta 33+89.51
Δ = 15° 15' 02.8" (RT)
D = 4° 18' 28.6"
L = 354.01'
T = 178.06'
R = 1,330.00'
DS = 60 mph
e = 06
RO = 150.00'

PI Sta 38+19.92
Δ = 12° 03' 27.5" (RT)
D = 5° 57' 11.9"
L = 202.54'
T = 101.64'
R = 962.42'
DS = EXIST.
e = EXIST.

PI Sta 41+08.78
Δ = 22° 14' 07.1" (RT)
D = 5° 59' 23.8"
L = 371.21'
T = 187.97'
R = 956.53'

PI Sta 45+71.93
Δ = 32° 16' 00.1" (RT)
D = 5° 55' 16.6"
L = 544.93'
T = 279.90'
R = 967.63'

-DR4-

PI Sta 10+63.29
Δ = 75° 06' 33.2" (LT)
D = 95° 29' 34.7"
L = 78.65'
T = 46.13'
R = 60.00'

PI Sta 12+40.12
Δ = 55° 47' 05.2" (RT)
D = 190° 59' 09.4"
L = 29.21'
T = 15.88'
R = 30.00'

END CONSTRUCTION
-DR4- POT Sta. 12+55.00

-DR4- PT Sta. 12+53.45

-DR4- PC Sta. 12+24.24

-DR4- PT Sta. 10+95.81

-Y2- PCC Sta. 39+20.81

N 6° 44' 32.9" W

-DR4- POT Sta. 12+91.43

MATCHLINE -Y2- STA. 34+00 SEE SHEET 13

END CONSTRUCTION
-Y2- POC Sta. 39+00.00

-Y2- PCC Sta. 42+92.02

-Y2- PC Sta. 37+18.28

-DR4- PC Sta. 10+17.16

N 12° 34' 55.2" E

S 77° 25' 04.8" E

N 62° 31' 38.1" W

-DR4- POT Sta. 10+00.00

-Y2- POT Sta. 36+03.14

-Y2- PT Sta. 35+65.46

SPECIAL LATERAL V DITCH SEE DETAIL P

PUE

CFW

GREU TL-3

8:1 TAPER

75' TRANSITION

R=40'

JOYCE THOMAS BROADWELL
WILL 14-E PAGE 451

KAREN PAUL OBERSHEA
DB 201I PG 341
MB 35 PG 151

GERALD PAUL
DB 979 PG 353

KAREN PAUL OBERSHEA
DB 963 PG 861

MAGGIE DELONG
DB 1093 PG 199

ALVIN BRYANT
DB 1843 PG 565

ANNIE OXENDINE
DB 1981 PG 868

KATHY DELONG
DB 848 PG 751

CATHERINE SESSOMS
WILL 95-E PG 116

SARAH SESSOMS HEIRS
DB 811 PG 25

RETAIN

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 34

REVISIONS
ROW REVISION - 11/23/2021 - CHANGED DRIVEWAY AND EASEMENT ON PARCELS 52,131,& 133 - CDA

8/17/99

4/7/2022
R:\Projects\Environmental\Design\I5987A_EC_PSH_034.dgn
samuel.skolnik

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.
NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.
NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED. UNIFORMLY TRANSITION DRIVEWAY SLOPES AS SHOWN.
PROPOSED PAVEMENT REMOVAL
FOR –Y2– PROFILE SEE SHEET 72, 73
FOR –DR4– PROFILE SEE SHEET 92
FOR DITCH DETAILS SEE SHEETS 2D–1 AND 2D–2

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-35/CONST.35
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

NAD 83/NA 2017

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 35

MATCHLINE -Y1A- STA. 23+00 SEE SHEET 17

-Y1A- POT Sta. 10+00.00

HAROLD STEPHEN BELL
DB 14V PG 221
MB 15 PG 23

EDDIE LEMONS
DB 429 PG 56

GOLBER HARDIN
DB 1644 PG 673
DB 1799 PG 753

GOLBER HARDIN
DB 1745 PG 904

JOHN HARDIN
DB 1808 PG 811

134 NO CLAIM
GOLBER HARDIN
DB 1799 PG 753

136

137

JIMMY BURNETTE
DB 1807 PG 545

66

-Y1A- T.S Sta. 19+12.68

-DR6- POT Sta. 11+14.37
-Y1A- POC Sta. 22+68.99

-DR5- POT Sta. 11+08.25
-Y1A- POC Sta. 22+25.40

-Y1A- SC Sta. 20+62.68

SPECIAL LATERAL V DITCH SEE DETAIL B

SPECIAL LATERAL V DITCH SEE DETAIL B

25' TYP
3501 HW

20'
15'
3505
RETAIN
REMOVE

36" RCP-IV

PUE

20'
18"
3504

R=45'
R=12'
N 66° 19' 11" W
N 23° 40' 49" E

N 33° 32' 19.3" E

-Y1A-

RETAIN

BEGIN CONSTRUCTION
-Y1A- POT Sta. 17+65.00

RICKY BLANKS
DB 1957 PG 755

HAROLD STEPHEN BELL
DB 14V PG 221
MB 15 PG 23

GOLBER HARDIN
DB 1625 PG 158

135 NO CLAIM

63

MARY BURNETTE
DB 2057 PG 126

SPECIAL LATERAL 3' BASE DITCH SEE DETAIL Z

75' TRANSITION

SPECIAL LATERAL V DITCH SEE DETAIL P

EW
3502

54" RCP-IV

-DR5- POT Sta. 10+00.00 REMOVE

-DR6- PT Sta. 10+41.43

-DR6- PC Sta. 10+13.51

-DR6- POT Sta. 10+00.00

N 50° 22' 19.3" W

BEGIN CONSTRUCTION
-DR5- POT Sta. 10+20.00

BEGIN CONSTRUCTION
-DR6- POC Sta. 10+15.00

-DR6-
PI Sta 10+27.59
Δ = 17° 46' 37.7" (LT)
D = 63° 39' 43.1"
L = 27.92'
T = 14.08'
R = 90.00'

-Y1A-
PIs Sta 20+12.70
Θs = 3° 13' 51.5"
Ls = 150.00'
LT = 100.02'
ST = 50.02'

PI Sta 25+48.58
Δ = 40° 08' 16.3" (LT)
D = 4° 18' 28.6"
L = 931.72'
T = 485.89'
R = 1,330.00'
DS = 60 mph
e = 06
RO = 150.00'

ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED.
UNIFORMLY TRANSITION DRIVEWAY SLOPES AS SHOWN.
PROPOSED PAVEMENT REMOVAL
FOR –Y1A– PROFILE SEE SHEET 74
FOR –DR5– PROFILE SEE SHEET 92
FOR –DR6– PROFILE SEE SHEET 93
FOR DITCH DETAILS SEE SHEETS 2D–1 AND 2D–2

REVISIONS

8/17/99

4/7/2022
R:\Engineering\Design\I5987A_EC_PSH_035.dgn
samuelsaiola

8/17/99

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES",SEE EC-3.

NOTE:
PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-36/CONST.36
RW SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 36

NAD 83/NA 2011

MATCHLINE –SR2– STA. 19+00 SEE SHEET 17

-SR2-
PI Sta 15+32.16
△ = 8° 30' 53.9" (LT)
D = 2° 20' 00.0"
L = 364.93'
T = 182.80'
R = 2,455.53'
DS = EXIST.
e = EXIST.

N 50° 22' 32.1" W

N 58° 53' 26.0" W

-SR2- POT Sta. 10+00.00

-SR2- PC Sta. 13+49.36

BEGIN CONSTRUCTION
-SR2- POC Sta. 16+60.00

BEGIN GRADE
-SR2- POT Sta. 17+60.00

-SR2- PT Sta. 17+14.29

DITCH BLOCK
TOP ELEV. = 149.2'
SEE DETAIL AB

SPECIAL LATERAL V DITCH
SEE DETAIL P

PUE
PUE
R = 30'
75' TRANSITION
20' TYP
12'

MICHAEL LOWERY
DB 1480 PG 721

SANDRA BLANKS
DB 639 PG 807

WILLIAM BLANKS
DB 1273 PG 875

MARY BURNETTE
DB 2057 PG 126

RACHEAL COLLINS
DB 2079 PG 19

64

65

FOR –SR2– PROFILE SEE SHEET 76
FOR DITCH DETAILS SEE SHEETS 2D–1 AND 2D–2

4/7/2022
R:\Engineering\Design\I5987A_EC_PSH_036.dgn
Samuel.Hall

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-37/CONST.37
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

NAD 83/NA 2011

MATCHLINE -Y1A- STA. 49+00 SEE SHEET 17

MATCHLINE -SR2- STA. 40+50 SEE SHEET 17

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 37

-Y1A- PC Sta. 55+70.40

END GRADE
-Y1A- PC Sta. 56+35.00

SPECIAL LATERAL V DITCH SEE DETAIL P

END CONSTRUCTION
-Y1A- PC Sta. 57+10.00

-Y1A- POT Sta. 61+98.04

-Y1A- PT Sta. 59+95.33

-DR8 POT Sta. 11+31.41

END CONSTRUCTION
-DR8- POT Sta. 10+80.00

-SR2- POT Sta. 44+67.96
-Y1A- POC Sta. 52+09.00

N 35° 02' 50.6" E

N 37° 31' 34.0" E

N 58° 27' 36.8" W

-SR2- PT Sta. 44+19.66

-DR8- POT Sta. 10+00.00
-Y1A- POS Sta. 49+97.77
GRADE TO DRAIN

-Y1A- SC Sta. 50+28.72

-Y1A- ES Sta. 49+03.72

N 36° 29' 36.9" E

-SR2-

-Y1A- ST Sta. 54+14.14

-Y1A- CS Sta. 52+89.14

-SR2- PC Sta. 42+53.94

SONNY OLIVER REALTY CO.
DB 1107 PG 256
81

SONNY OLIVER REALTY CO.
DB 1107 PG 254
81

LORRAINE CANADY
DB 1195 PG 339
MB 30 PG 76
82

LORRAINE CANADY
DB 1195 PG 339
MB 37 PG 36
82

LORRAINE CANADY
DB 1195 PG 339
MB 37 PG 36
82

BILLY BLANKS
DB 1084 PG 378
MB 37 PG 36
139

MARTY BLANKS
DB 1837 PG 125
141

NO CLAIM
142

NO CLAIM
TEN MILE BAPTIST CHURCH
DB 1084 PG 374
MB 37 PG 36
144

NO CLAIM
TEN MILE BAPTIST CHURCH
DB 1501 PG 106
MB 37 PG 36
143

LINDA BLANKS
DB 1125 PG 106
MB 37 PG 36
83

WALTER CANADY
DB 1078 PG 424

MARTY BLANKS
DB 1837 PG 125

SPECIAL LATERAL V DITCH SEE DETAIL P

2'-6" CURB & GUTTER (TYP)

15" RCP IV

REMOVE

TRANSITION REMOVE

-SR2-
PI Sta 43+62.98
Δ = 94° 57' 13.7" (LT)
D = 57° 17' 44.8"
L = 165.73'
T = 109.04'
R = 100.00'
DS = 15 mph
e = 05
R0 = 100.00'

-Y1A-

PIs Sta 49+87.06	PI Sta 51+59.07	PIs Sta 53+30.81	PI Sta 57+82.90
Θs = 1° 32' 12.9"	Δ = 6° 24' 13.7" (RT)	Θs = 1° 32' 12.9"	Δ = 2° 28' 43.4" (RT)
Ls = 125.00'	D = 2° 27' 32.6"	Ls = 125.00'	D = 0° 35' 00.0"
LT = 83.34'	L = 260.42'	LT = 83.34'	L = 424.92'
ST = 41.67'	T = 130.34'	ST = 41.67'	T = 212.50'
	R = 2,330.00'		R = 9,822.13'
	DS = 60 mph		DS = EXIST.
	e = 05		e = EXIST.
	R0 = 125.00'		

ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED.
UNIFORMLY TRANSITION DRIVEWAY SLOPES AS SHOWN.
FOR -Y1A- PROFILE SEE SHEET 75
FOR -SR2- PROFILE SEE SHEET 77
FOR -DR8- PROFILE SEE SHEET 94
FOR DITCH DETAILS SEE SHEETS 2D-1 AND 2D-2

REVISIONS
ROW REVISION - 10/22/2021 - CHANGED PARCEL 138 TO 81, PARCEL 138 IS REMOVED (NOT USED) - CDA
ROW REVISION - 10/22/2021 - CHANGED PARCEL 140 TO 82, PARCEL 140 IS REMOVED (NOT USED) - CDA
ROW REVISION - 10/22/2021 - MODIFIED PUE ON PARCEL 81 AND PARCEL 82 - CDA

8/17/99

4/7/2022
R:\Engineering\Environmental\Design\I5987A_EC_PSH_037.dgn
Samuel.Sabolic

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-38/CONST.38
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

-Y3-
PI Sta 19+98.48
△ = 6° 29' 08.7" (LT)
D = 1° 41' 24.5"
L = 383.74'
T = 192.08'
R = 3,390.00'
DS = 60 mph
e = 04
RO = 100'

-Y3- POT Sta. 10+00.00

-Y3- PC Sta. 18+06.41

-Y3- PT Sta. 21+90.15

BEGIN CONSTRUCTION
-Y3- Sta.16+50.00

MATCHLINE –Y3– STA 24+00.00
SEE SHEET 30

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 38

MARGARET R. RUSS
DB 1590 PG 860
DB 2004 PG 434

JOSEPH G. RIDDLE
AND WIFE,
GAIL A. RIDDLE
DB 1580 PG 865

TO WATTS
DAIRY ROAD

SR 1258-W. McDOWELL CROSSING RD 18' BST

N 50° 35' 27.7" E

N 44° 06' 39.0" E

WOODS

CULTIVATED FIELD

EXISTING R/W

25 PR

SPECIAL LATERAL
3.0' BASE DITCH
SEE DETAIL EE

3.0' LATERAL
BASE DITCH
SEE DETAIL FF

CLASS 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE

4.0' LATERAL
BASE DITCH
SEE DETAIL FF
REMOVE

CLASS 'B' RIP RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE

RETAIN
TEMPORARY SHORING

BEG SBG
+80.00

BEG SBG
+10.00

15" RCP-IV

W2 ELBOWS

PUE

25.00' TYP

+39.74

+77.50

+56.82

75' TRANSITION

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

PROPOSED PAVEMENT REMOVAL

FOR –Y3– PROFILE SEE SHEET 89

REVISIONS

8/17/99

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_038.dgn
samuelskolo

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-39/CONST.39
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

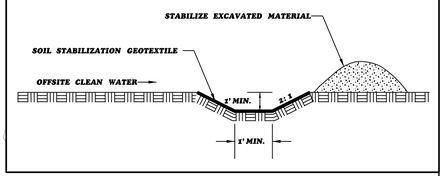
NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES",SEE EC-3.

NOTE:
PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD — CWD — CWD

(Not to Scale)



REVISIONS

8/17/99

NAD 83/NA 2011

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 39

MATCHLINE -Y3- STA 36+00.00 SEE SHEET 30

Excavate Proposed Ditch according to Detail FF from Sta. 34+05 to Sta. 38+50

-Y3- POC Sta. 36+35.00
-DRI- PT Sta. 12+74.50

-Y3- PRC Sta. 38+54.22

-Y3- PRC Sta. 42+29.36

END CONSTRUCTION
-Y3- Sta. 43+50.00

-Y3- PT Sta. 50+13.41

3.0' LATERAL BASE DITCH SEE DETAIL FF

EARTH BERM/DITCH BLOCK HEAD WATER CONTROL TO EL=165.10 SEE DETAIL TT

SPECIAL LATERAL 3.0' BASE DITCH SEE DETAIL EE

EL=164.60

TEMPORARY SHORING

END SBG +22.00

RCP-III

CWD

HW

+35.00

+79.22

25.00' TYP

+42.50

25.00' TYP

75' TRANSITION

SPECIAL LATERAL 3.0' BASE DITCH SEE DETAIL EE

SPECIAL LATERAL 3.0' BASE DITCH SEE DETAIL EE

CLASS 'B' RIP RAP EST. 8 TONS EST. 21 SY GEOTEXTILE

REMOVE

N 43° 12' 07.8" W

-DRI- PT Sta. 11+65.81

CFW

EXISTING R/W

VAULT

25 PR

-Y3-

-DRI-

-Y3-

PI Sta 36+29.63	PI Sta 40+41.98	PI Sta 46+21.38
△ = 5° 15' 21.3" (RT)	△ = 6° 20' 25.3" (LT)	△ = 0° 05' 40.4" (RT)
D = 1° 10' 09.5"	D = 1° 41' 24.5"	D = 0° 00' 43.4"
L = 449.49'	L = 375.14'	L = 784.05'
T = 224.90'	T = 187.76'	T = 392.03'
R = 4,900.00'	R = 3,390.00'	R = 475,060.14'
DS = 60 mph	DS = 60 mph	DS = EXIST
e = 03	e = 04	e = NC
R0 = 75'	R0 = 100'	

-DRI-

PI Sta 11+25.86
△ = 89° 09' 07.8" (LT)
D = 81° 51' 04.0"
L = 108.92'
T = 68.97'
R = 70.00'

K.M. BIGGS, INC.
MB 12 PG 100
MB 48 PG 98
124

JOHN B. BUNN ET ALS
WB 08-E PG 000
MB 43 PG 144
125

K.M. BIGGS, INC.
MB 12 PG 100
MB 48 PG 98
121

ST. PAULS FIRST PENTECOSTAL HOLINESS CHURCH, INC.
DB 1916 PG 12
MB 48 PG 123
146
NO CLAIM

WOODS

FOR –Y3– PROFILE SEE SHEETS 89 & 90
FOR –DRI– PROFILE SEE SHEET 90

4/7/2022
R:\Environmental\Design\I5987A_EC_PSH_039.dgn
sandrakelly

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-40/CONST.4
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE: INSTALL MATTING FOR EROSION CONTROL IN ALL PROPOSED DITCH LINES EXCEPT WHERE PERMANENT LINERS ARE SPECIFIED ON THE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.

NOTE: UTILIZE FABRIC INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

REVISIONS

8/17/99 ROW REVISION - 02/01/2022 - REVISED TCE & PUE AND ADDED DUE ON PARCEL 1-SR6- STA 27+80 TO 29+80. REVISED DRAINAGE DESIGN ON -SR6- STA.65+00 LT.- CDA

ROW REVISION - 02/01/2022 - REVISED DRIVEWAY ISLAND LT -SR6- STA 37+00 AND ADJUSTED TCE ON PARCEL 1- CDA

BEGIN TIP PROJECT I-5987A -L- POT Sta. 67+00.00

TIE TO TIP PROJECT I-6064 -L- POT Sta. 488+46.78

BEGIN CONSTRUCTION
-L- POT Sta. 62+30.00

BEGIN CONSTRUCTION
-SR6- POT Sta. 30+67.00
TIE TO TIP PROJECT I-6064
-SR4- POT Sta.67+37.99

-SR6-
PI Sta 39+07.68
△ = 3°00' 45.6" (LT)
D = 0°43' 40.9"
L = 413.81'
T = 206.95'
R = 7,870.00'
DS = 50 mph
e = NC

-SR6- PC Sta. 37+00.72

INSTALL 3-6"X6" SLOTS IN BARRIER WALL FOR DRAINAGE RELIEF AT SAG
-L- STA. 71+94 LT
-L- STA. 72+05 CL
-L- STA. 72+13 RT

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 4

BEGIN RESURFACING
-SR7- POT Sta. 30+67.00
TIE TO TIP PROJECT I-6064
-SR5- POT Sta.80+19.49

MATCHLINE -L- STA. 74+00 SEE SHEET 5

FOR -L- PROFILE SEE SHEET 40
FOR -SR6- PROFILE SEE SHEET 78
FOR DITCH DETAILS SEE SHEETS 2D-1 AND 2D-2

4/7/2022
R:\Environmental\Design\15987A_EC_PSH_040.dgn
smiele1olding

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-41/CONST.5
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES",SEE EC-3.

NOTE: CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS.THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE: INSTALL MATTING FOR EROSION CONTROL IN ALL PROPOSED DITCH LINES EXCCEPT WHERE PERMANENT LINERS ARE SPECIFIED ON THE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

-SR6-
PI Sta 39+07.68
Δ = 3° 00' 45.6" (LT)
D = 0° 43' 40.9"
L = 413.81'
T = 206.95'
R = 7,870.00'
DS = 50 mph
e = NC

PI Sta 43+12.89
Δ = 2° 53' 15.0" (RT)
D = 0° 43' 40.9"
L = 396.62'
T = 198.35'
R = 7,870.00'
DS = 50 mph
e = NC

PI Sta 53+74.13
Δ = 33° 38' 33.1" (LT)
D = 4° 29' 37.6"
L = 748.65'
T = 385.46'
R = 1,275.00'
DS = 50 mph
e = 04
RO = 100.00'

-SR8-
PI Sta 11+20.99
Δ = 50° 04' 26.4" (RT)
D = 67° 24' 24.5"
L = 74.29'
T = 39.70'
R = 85.00'
DS = EXIST.
e = EXIST.

PI Sta 13+49.88
Δ = 2° 57' 44.1" (LT)
D = 2° 30' 26.9"
L = 118.14'
T = 59.08'
R = 2,285.00'
DS = EXIST.
e = EXIST.

-YIRPB-
PIs Sta 11+33.37
Θs = 3° 52' 16.8"
Ls = 200.00'
LT = 133.37'
ST = 66.70'

-YIRPC-
PIs Sta 13+33.76
Θs = 3° 52' 16.8"
Ls = 200.00'
LT = 133.37'
ST = 66.70'

NAD 83/NA 2011

NC GRID 83 NA 2011

INSTALL 3-6"X6" SLOTS IN BARRIER WALL FOR DRAINAGE RELIEF AT SAG
-L- STA. 79+05 LT
-L- STA. 78+95 CL
-L- STA. 78+83 RT
-L- STA. 85+73 CL
-L- STA. 86+90 RT

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 5

MATCHLINE -L- STA. 74+00 SEE SHEET 4

MATCHLINE -L- STA. 87+00 SEE SHEET 6

DOHERTY HOLDINGS SIXTH LLC
DB 1957 PG 408
MB 48 PG 92
5

FRENCH FAMILY PROPERTIES
DB 1430 PG 572
6

CROSSROADS HOLDINGS LLC
DB 2052 PG 41
7

DAVID EDGE
DB 1048 PG 872
MB 31 PG 49
9

DAVID EDGE
DB 1048 PG 872
MB 31 PG 49
10

-SR6- PRC Sta. 41+14.54

-SR6- PT Sta. 45+11.5

-YIRPB- TS Sta. 10+00.00
-L- POT Sta. 85+71.93
OFF 61.00' LT

-SR6- PC Sta. 49+88.67

SPECIAL LATERAL V DITCH SEE DETAIL X

100' TAPER

300' TAPER

780' ACCELERATION

200' TAPER

N 14° 39' 57.3" E

N 14° 47' 28.0" E

N 14° 47' 28.0" E

N 14° 47' 28.0" E

N 14° 47' 28.0" E

N 17° 45' 12.1" E

N 17° 05' 28.0" E

N 14° 47' 28.0" E

N 14° 47' 28.0" E

N 32° 19' 14.3" W

N 50° 25' 47.3" E

-SR7- PC Sta. 41+62.92

-SR7- PT Sta. 45+19.30

-SR7-
PI Sta 43+47.09
Δ = 35° 38' 19.3" (RT)
D = 10° 00' 00.0"
L = 356.39'
T = 184.17'
R = 572.96'
DS = EXIST.
e = EXIST.

BEGIN RESURFACING
-SR8- POT Sta. 10+00.00
-SR7- POC Sta. 45+14.21

END RESURFACING
-SR7- POT Sta. 46+00.00

-SR7- POT Sta. 47+22.26

-SR8- PC Sta. 10+81.29

-SR8- PT Sta. 11+55.57

-SR8- Sta. 12+90.80

-YIRPC- POT Sta. 10+00.00
-L- POT Sta. 83+44.00
OFF 61.00' RT

-YIRPC- TS Sta. 12+00.39

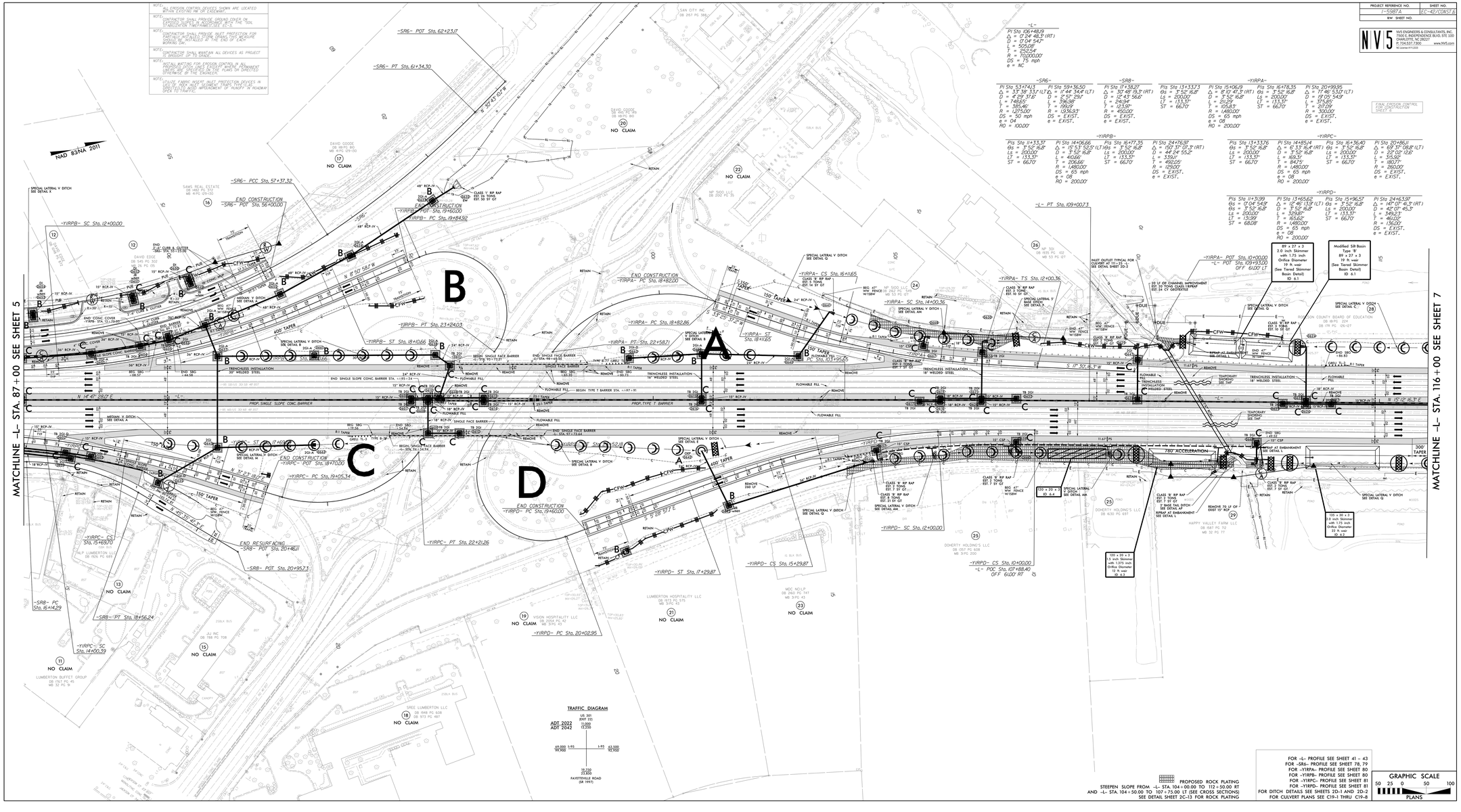
WAL-MART REAL ESTATE
DB 1105 PG 605
MB 37 PG 62
4
NO CLAIM

WILLIAM BRYANT
DB 1109 PG 601
8
NO CLAIM

LUMBERTON BUFFET GROUP
DB 1767 PG 45
MB 32 PG 91
11
NO CLAIM

FOR -L- PROFILE SEE SHEET 41
FOR -SR6- PROFILE SEE SHEET 78
FOR -Y1RPB- PROFILE SEE SHEET 80
FOR -Y1RPC- PROFILE SEE SHEET 81
FOR DITCH DETAILS SEE SHEETS 2D-1 AND 2D-2
FOR WALL PLANS SEE W-? THRU W-?

4/7/2022
R:\Projects\Environmental\Design\I5987A_EC_PSH_041.dgn
samuel.kalang


NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.
NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON DISTURBED AREAS WITHIN 14 CALENDAR DAYS AFTER FINAL GRADE IS REACHED AS PER THE "SOIL STABILIZATION TIMEFRAMES" SEE SPECS.
NOTE: CONTRACTOR SHALL PROVIDE DAILY INSPECTION FOR EROSION CONTROL DEVICES AND REPAIR OR REPLACE DEVICES AS NEEDED. DEVICES TO BE INSTALLED BY THE END OF EACH WORKING DAY.
NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT PROGRESSES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
NOTE: INSTALL MATTING FOR EROSION CONTROL IN ALL DITCHES AS SHOWN ON THE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.
NOTE: ATLANTIC FABRIC INSERT INLET PROTECTION DEVICES IN ALL INLETS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. IMPLEMENT UP TO 4 LANES OF TRAFFIC OPEN TO TRAFFIC
PROJECT REFERENCE NO. R-5087A
SHEET NO. EC-4S/CONST.6
RW SHEET NO.
NV5 NV5 ENGINEERS & CONSULTANTS, INC. 7500 E. INDEPENDENCE BLVD, STE 100 CHARLOTTE, NC 28227 P: 704.537.7300 www.NV5.com NC License # P-1205
FINAL EROSION CONTROL CONSTRUCTION SHEET 6
NAD 83NA 2011
MATCHLINE –L– STA. 87+00 SEE SHEET 5
MATCHLINE –L– STA. 116+00 SEE SHEET 7
–SR6– POT Sta. 62+23.17
–SR6– PT Sta. 61+34.30
–SR6– PCC Sta. 57+37.32
END CONSTRUCTION –SR6– POT Sta. 56+00.00
–YIRPA– SC Sta. 12+00.00
–YIRPA– PC Sta. 19+84.92
END CONSTRUCTION –YIRPA– PC Sta. 19+60.00
–YIRPB– PT Sta. 21+24.03
–YIRPB– ST Sta. 18+10.66
–YIRPA– PC Sta. 18+82.86
–YIRPA– PT Sta. 22+58.71
–YIRPA– ST Sta. 18+11.65
–YIRPA– CS Sta. 16+11.65
–YIRPA– SC Sta. 14+00.36
–YIRPA– TS Sta. 12+00.36
–YIRPA– POT Sta. 10+00.00
–L– POT Sta. 109+93.00 OFF 6100 LT
–L– PT Sta. 109+00.73
–YIRPC– PC Sta. 19+05.34
–YIRPC– POT Sta. 18+70.00
–YIRPC– PT Sta. 22+21.26
END RESURFACING –SR8– POT Sta. 201+95.73
–SR8– PC Sta. 16+14.29
–SR8– PT Sta. 18+56.24
–YIRPC– SC Sta. 14+00.39
–YIRPC– CS Sta. 15+69.70
–YIRPD– PC Sta. 19+60.00
–YIRPD– PT Sta. 22+00.00
–YIRPD– ST Sta. 17+29.87
–YIRPD– CS Sta. 15+29.87
–YIRPD– SC Sta. 12+00.00
–YIRPD– PC Sta. 20+02.95
–L– POC Sta. 107+88.40 OFF 6100 RT
–YIRPD– CS Sta. 10+00.00
PI Sta 106+48.19 Δ = 17° 24' 48.3" (RT) D = 17° 04' 54.2" L = 525.08' T = 262.54' R = 70.000.00' DS = 75 mph e = NC
–SR6– PI Sta 53+74.15 Δ = 33° 38' 53.2" (LT) D = 4° 25' 37.6" L = 748.65' T = 385.46' R = 1275.00' DS = 50 mph e = 04 RD = 100.00'
PI Sta 59+36.50 Δ = 11° 44' 34.4" (LT) D = 2° 51' 29.6" L = 396.98' T = 199.19' R = 1,536.93' DS = EXIST. e = EXIST.
–SR8– PI Sta 17+38.27 Δ = 30° 48' 19.3" (RT) D = 12° 43' 56.6" L = 241.94' T = 123.91' R = 450.00' DS = EXIST. e = EXIST.
PI Sta 13+33.73 Θs = 3° 52' 16.8" Ls = 200.00' LT = 133.37' ST = 66.70'
–YIRPA– PI Sta 15+06.19 Δ = 8° 10' 41.3" (RT) D = 3° 52' 16.8" L = 211.29' T = 105.83' R = 1,480.00' DS = 65 mph e = 08 RD = 200.00'
PI Sta 16+78.35 Θs = 3° 52' 16.8" Ls = 200.00' LT = 133.37' ST = 66.70'
PI Sta 20+99.95 Δ = 71° 46' 53.2" (LT) D = 19° 05' 54.9" L = 375.85' T = 217.09' R = 300.00' DS = EXIST. e = EXIST.
–YIRPB– PI Sta 11+33.37 Θs = 3° 52' 16.8" Ls = 200.00' LT = 133.37' ST = 66.70'
PI Sta 14+06.66 Δ = 151° 53' 52.5" (LT) D = 3° 52' 16.8" L = 410.66' T = 206.66' R = 1,480.00' DS = 65 mph e = 08 RD = 200.00'
PI Sta 16+77.35 Θs = 3° 52' 16.8" Ls = 200.00' LT = 133.37' ST = 66.70'
PI Sta 24+76.97 Δ = 150° 37' 07.3" (RT) D = 44° 24' 55.2" L = 339.11' T = 492.25' R = 129.00' DS = EXIST. e = EXIST.
–YIRPC– PI Sta 13+33.76 Θs = 3° 52' 16.8" Ls = 200.00' LT = 133.37' ST = 66.70'
PI Sta 14+85.14 Δ = 6° 33' 16.4" (RT) D = 3° 52' 16.8" L = 169.31' T = 84.75' R = 1,480.00' DS = 65 mph e = 08 RD = 200.00'
PI Sta 16+36.40 Θs = 3° 52' 16.8" Ls = 200.00' LT = 133.37' ST = 66.70'
PI Sta 20+86.11 Δ = 69° 37' 08.8" (LT) D = 22° 05' 12.6" L = 315.92' T = 180.77' R = 260.00' DS = EXIST. e = EXIST.
–YIRPD– PI Sta 11+31.99 Θs = 0° 04' 54.9" Ls = 200.00' LT = 133.29' ST = 68.08'
PI Sta 13+65.62 Δ = 12° 46' 13.9" (LT) D = 3° 52' 16.8" L = 329.87' T = 165.62' R = 1,480.00' DS = 65 mph e = 08 RD = 200.00'
PI Sta 15+96.57 Θs = 3° 52' 16.8" Ls = 200.00' LT = 133.37' ST = 66.70'
PI Sta 24+63.91 Δ = 147° 07' 41.5" (RT) D = 42° 07' 45.3" L = 349.23' T = 461.02' R = 136.00' DS = EXIST. e = EXIST.
89 x 27 x 3 2.0 inch Skimmer with 1.75 inch Orifice Diameter 19 ft. wair (See Tiered Skimmer Basin Detail) ID 6.1
Modified SB Basin Type "B" 89 x 27 x 3 19 ft. wair (See Tiered Skimmer Basin Detail) ID 6.1
120 x 20 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 12 ft. wair ID 6.3
120 x 20 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 12 ft. wair ID 6.4
130 x 30 x 3 2.0 inch Skimmer with 1.75 inch Orifice Diameter 19 ft. wair ID 6.2
780' ACCELERATION
300' TAPER
150' TAPER
400' TAPER
TRAFFIC DIAGRAM
US 301 (BRT 20) 12,200 13,200
ADT 2022
ADT 2042
49,000 I-95 99,900
I-95 63,500 92,100
19,700 23,800
FAYETTEVILLE ROAD (SR 1997)
NO CLAIM
PROPOSED ROCK PLATING
STEEPEN SLOPE FROM –L– STA. 104+00.00 TO 112+50.00 RT AND –L– STA. 104+50.00 TO 107+75.00 LT (SEE CROSS SECTIONS) SEE DETAIL SHEET 2C-13 FOR ROCK PLATING
FOR –L– PROFILE SEE SHEET 41 – 43
FOR –SR6– PROFILE SEE SHEET 78, 79
FOR –YIRPA– PROFILE SEE SHEET 80
FOR –YIRPB– PROFILE SEE SHEET 80
FOR –YIRPC– PROFILE SEE SHEET 81
FOR –YIRPD– PROFILE SEE SHEET 81
FOR DITCH DETAILS SEE SHEETS 2D-1 AND 2D-2
FOR CULVERT PLANS SEE C1Y-1 THRU C1Y-8
GRAPHIC SCALE
50 25 0 50 100
PLANS

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-43/CONST.7
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

NAD 83/NA 2011

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 7

REVISIONS

8/17/99

MATCHLINE –L– STA. 116+00 SEE SHEET 6

MATCHLINE –L– STA. 130+00 SEE SHEET 8

120 125 130

ROBESON COUNTY BOARD OF EDUCATION
DB 181PG 224
DB 17R PG 126-127
28

POND

2SBK BLDG

1SBK BLDG

CONC

SOIL

WOODS

R/W MON

48" WW 1SBW

SPECIAL LATERAL V DITCH SEE DETAIL C

CLASS 'B' RIP RAP EST. 5 TONS EST. 14 SY GT

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GT

0710 0711

INV=127.67'

INV=130.08'

TRENCHLESS INSTALLATION 24" WELDED STEEL

TRENCHLESS INSTALLATION 16" WELDED STEEL

FLOWABLE FILL

I-95 SB 37' BST

I-95 NB 43' BST

REMOVE TB 2GI 0706

TB 2GI 0701 0703 0704 0705 0707 0708 0709 0712

15"RCP-IV

15" RCP-IV

18" RCP-IV

PROP. TYPE T BARRIER

–L–

N 15°12' 16.3" E

TOP=132.60' INC

12' PS

48'

02 03

300' TAPER

+68.40

END 47" WW FENCE W/1SBW

RETAIN

INV=125.87

INV=124.81

SPECIAL LATERAL V DITCH SEE DETAIL Q

SPECIAL LATERAL V DITCH SEE DETAIL D

8:1 TAPER

GREU TL-3

15" CSP 11.67' PS

BEG SBG +15.50

0713

HAPPY VALLEY FARM LLC
DB 1587 PG 712
MB 32 PG 77
29

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE: INSTALL MATTING FOR EROSION CONTROL IN ALL PROPOSED DITCH LINES EXCCEPT WHERE PERMANENT LINERS ARE SPECIFIED ON THE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

FOR –L– PROFILE SEE SHEET 44
FOR DITCH DETAILS SEE SHEETS 2D-1 AND 2D-2

8/19/2022
R:\Environmental\Design\15987A_EC_PSH_043.dgn
dlittlejohn

PROJECT REFERENCE NO.	SHEET NO.
I-5987A	EC-44/CONST.8
R/W SHEET NO.	

NV5 ENGINEERS & CONSULTANTS, INC.
7500 E. INDEPENDENCE BLVD, STE 100
CHARLOTTE, NC 28227
P: 704.537.7300 www.NV5.com
NC License # F-1333

8/17/99

REVISIONS

MATCHLINE –L– STA. 130+00 SEE SHEET 7

MATCHLINE –L– STA. 144+00 SEE SHEET 9

NAD 83/NA 2011

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 8

130 135 140

EXISTING R/W

60.00'

28
ROBESON COUNTY BOARD OF EDUCATION
DB 181PG 224
DB 17R PG 126-127

31
NO CLAIM
ROBESON COMMUNITY COLLEGE
DB 1669 PG 612

SPECIAL LATERAL V DITCH SEE DETAIL C

CLASS 'B' RIP RAP EST. 2 TONS EST. 7 SY GT

48" WW ISBW

WOODS

0812

15" CSP

INV=133.77'

INV=133.13'

CA

8:1 TAPER

TB 2GI 0811

BEG SBG +70.00

11.67' PS

FLOWABLE FILL

SPECIAL LATERAL V DITCH SEE DETAIL E

0814

END SBG +32.50

CLASS 'B' RIP RAP EST. 2 TONS SY GT

REU TL-3

TB 2GI 0813

8:1 TAPER

100 x 20 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 8.1

TRENCHLESS INSTALLATION
36" WELDED STEEL

FLOWABLE FILL

I-95 SB 37' BST

CLASS 'B' RIP RAP EST. 11 TONS EST. 28 SY GT

186 x 31 x 3
2.5 inch Skimmer
with 2.125 inch
Orifice Diameter
20 ft. weir
ID 8.2

31
NO CLAIM
ROBESON COMMUNITY COLLEGE
DB 1669 PG 612

SPECIAL LATERAL V DITCH SEE DETAIL E

48" WW ISBW

WOODS

30" RCP

INV=132.

DB

EW

18" RCP–IV

TB 2GI 0802

15" RCP–IV

TB 2GI 0808

15" RCP–IV

N 15°12'16.3" E

INV=133.65'

–L–

TYPE T BARRIER

TB 2GI 0809

TB 2GI 0805

TB JB w/MH

0806

TB 2GI 0804

15" RCP–IV

TB 2GI 0810

TRENCHLESS INSTALLATION
36" WELDED STEEL

FLOWABLE FILL

I-95 NB 37' BST

END SBG +78.00

8:1 TAPER

CAT–1

11.67' PS

12" PS

INV=132.8

0807 HW

A

CFW

EXISTING R/W

48" WW ISBW

SPECIAL LATERAL V DITCH SEE DETAIL C

DITCH BLOCK TOP ELEV. = 136.0' SEE DETAIL AB

SPECIAL LATERAL V DITCH SEE DETAIL E

SPECIAL LATERAL V DITCH SEE DETAIL E

HAPPY VALLEY FARM LLC
DB 1587 PG 712
MB 32 PG 77

30
NO CLAIM

HAPPY VALLEY FARM LLC
DB 1587 PG 712
MB 32 PG 77

30
NO CLAIM

168 x 28 x 3
2 inch Skimmer
with 1.675 inch
Orifice Diameter
17 ft. weir
ID 8.3

INV=130.26'

36" RCP

Could Not Locate

CIP

72" RD

EXISTING R/W

WILLIAM FERRY
DB 1067 PG 435

32
NO CLAIM

ISBKD

60.00'

EXISTING R/W

BK

10' CONC DR

EDINBOROUGH RD 2705ST

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMANT.

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES".SEE EC-3.

NOTE: CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE: INSTALL MATTING FOR EROSION CONTROL IN ALL PROPOSED DITCH LINES EXCEPT WHERE PERMANENT LINERS ARE SPECIFIED ON THE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE-A AS DIRECTED.TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

FOR –L– PROFILE SEE SHEET 45
FOR DITCH DETAILS SEE SHEETS 2D–1 AND 2D–2

4/7/2022
R:\EC\Environmental\Design\I5987A_EC_PSH_044.dgn
jamie.laskaris